



zenith

®



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glossary of terms

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HDTV
HIGH DEFINITION TELEVISION

GUIDEplus⁺
GEMSTAR

DOLBY
DIGITAL

VCRplus⁺

Toll Free Digital TV Hotline: 1-877-939-6484

operating guide

**WARNING**

RISK OF ELECTRIC SHOCK
DO NOT OPEN

**WARNING:**

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

POWER CORD POLARIZATION:

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION:

This equipment, trade name Zenith, model number, IQB56W10G, has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The responsible party for this device compliance is:

Zenith Electronics Corporation

201 James Record Road

Huntsville, AL 35824, USA

Digital TV Hotline:

1-877-939-6484

CAUTION:

Do not attempt to modify this product in any way without written authorization from Zenith Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

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Dolby Digital®

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential Unpublished Works. ©1992-1997 Dolby Laboratories, Inc. All rights reserved.

The presence of the DTV certification mark indicates that this product will successfully receive digital television transmissions that conform to any and all of the video formats described in the ATSC Digital Television Standard.

VCR Plus+, PlusCode and GUIDE Plus+ are trademarks of Gemstar Development Corporation. The VCR Plus+ and GUIDE Plus+ systems are manufactured under license from Gemstar Development Corporation and VCR Index Systems B.V., respectively.

GEMSTAR IS NOT IN ANY WAY LIABLE FOR THE ACCURACY OF THE PROGRAM SCHEDULE INFORMATION PROVIDED BY THE GUIDE PLUS+ SYSTEM. IN NO EVENT SHALL GEMSTAR BE LIABLE FOR ANY AMOUNTS REPRESENTING LOSS OF PROFITS, LOSS OF BUSINESS, OR INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE PROVISION OR USE OF ANY INFORMATION, EQUIPMENT, OR SERVICES RELATING TO THE GUIDE PLUS+ SYSTEM.

VCR is required for recording.

206-3583

IMPORTANT SAFETY INSTRUCTIONS

1. Read Instructions

Read all of the safety and operating instructions before operating the product.

2. Retain Instructions

Keep all safety and operating instructions for future reference.

3. Heed Warnings

Follow warnings on the product and in the operating guide.

4. Follow Instructions

Follow all operating and use instructions.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do NOT use liquid cleaners or aerosol cleaners! Use a damp cloth for cleaning.

6. Attachments

Do not use attachments not recommended by product manufacturer as they may cause hazards.

7. Water and Moisture

Do not use this product near water—for example, near a bathtub, wash bowl, sink, or laundry tub, in a wet basement, or near a swimming pool.

8. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use mounting accessory recommended by the manufacturer.

9. Transporting Product

Move product and cart combinations with care. Quick stops, excessive force, and uneven surfaces may cause product and cart combination to overturn.



PORTABLE CART WARNING

10. Ventilation

Slots and openings in the cabinet must not be blocked or covered. They are provided for ventilation, to ensure reliable operation, and to protect from overheating. Never block openings by placing the product on a bed, sofa, rug, or other similar surface. Do not place the product in a built-in installation such as a bookcase or

rack unless proper ventilation is provided or manufacturer's instructions have been adhered to.

11. Power Sources

Operate product only from the type of power source indicated on marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power or other sources, refer to the operating guide.

12. Power Cord Polarization

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. Power-Cord Protection

Route power-supply cords so they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.



14. Outdoor Antenna Grounding

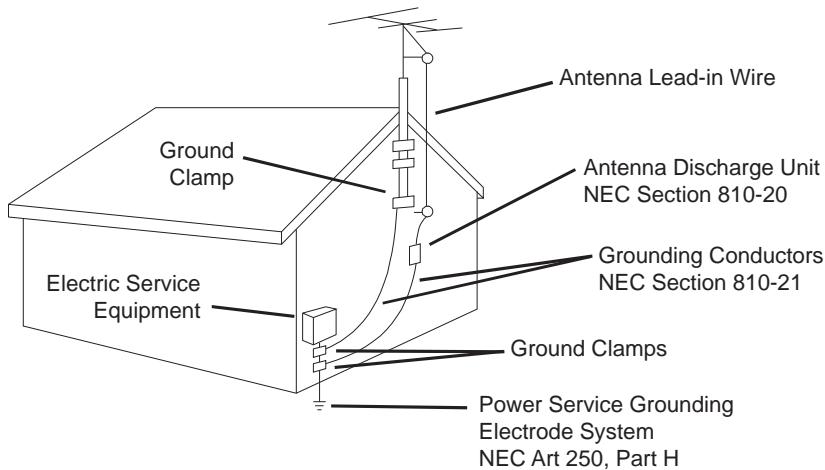
If an outside antenna or cable system is connected to this product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (USA), ANSI/NFPA 70, provides information on grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit connection to the grounding electrodes, and requirements for the grounding electrode. (See Fig. 1 on reverse side for an example).

15. Lightning

For added protection for this product during a lightning storm, or when product is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect antenna or cable system. This will prevent damage to product due to lightning and power line surges.



IMPORTANT SAFETY INSTRUCTIONS



16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, take extreme care to keep from touching such power lines or circuits, as contact with them might be fatal.

17. Overloading

Do not overload wall outlets, extension cords or integral convenience receptacles, as this can result in risk of fire or electric shock.

18. Object and Liquid Entry

Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or shortout parts that could result in fire or electric shock. Never spill liquid of any kind on the product.

19. Heat

Keep product away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.



20. Wall or Ceiling Mounting

Mount a product to a wall or ceiling only as recommended by the manufacturer.

21. Servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

22. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under these conditions:

- a. If the power-supply cord or plug is damaged.
- b. If liquid has been spilled or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product doesn't operate normally by following the operating guide. Adjust only those controls covered by the operating guide; improper adjustment of other controls may result in damage and often requires extensive work by a qualified technician to restore the product to normal operation.
- e. If the product has been dropped or cabinet has been damaged.
- f. If the product exhibits a distinct change in performance.

23. Replacement Parts

When replacement part(s) are required, be sure service technician has used replacement part(s) specified by manufacturer or have same characteristics as original part(s). Unauthorized substitutions may result in fire, electric shock, or other hazards.

24. Safety Check

Upon completion of any service or repairs to this product, ask service technician to perform safety checks to determine that product is in proper operating condition.

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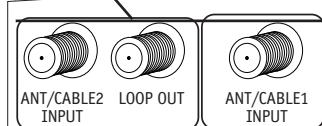
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Rear Audio/Video Jacks

Connecting cables to your Entertainment Machine.

RF Connectors: Antenna/Cable 1, Antenna/Cable 2, and Loop Out

Used to connect analog cable or antenna signals to the television, either directly or through your cable box.



RF Connectors: Digital TV Input

Used to connect antenna signals to the television.

Note: A signal splitter will be necessary if you plan to use your antenna for both digital and analog reception.

Monitor Out
Connects to a second TV or Monitor.

Video 1 or 2
Connects the video signals from various types of equipment.

S-VIDEO In
A connection available with some high-end equipment that provides even better picture quality for Video 1.

VGA and DBS Input
Used to connect from a VGA source or DBS Satellite system.

Dolby Digital In
Connects to a Dolby Digital output from DVD or Hi-Res component.

Dolby Digital In
Connects to a Dolby Digital output from HD DBS system.

Dolby Digital Out
Connects to a Dolby Digital A/V receiver.

Left/Right Audio
Used for stereo sound from various types of equipment.

Y, Pb, Pr
DVD Component Video and HD Component Video

Some top-of-the-line DVD players use what is called "component video," for extremely accurate picture reproduction. Refer to your DVD manual for further information.

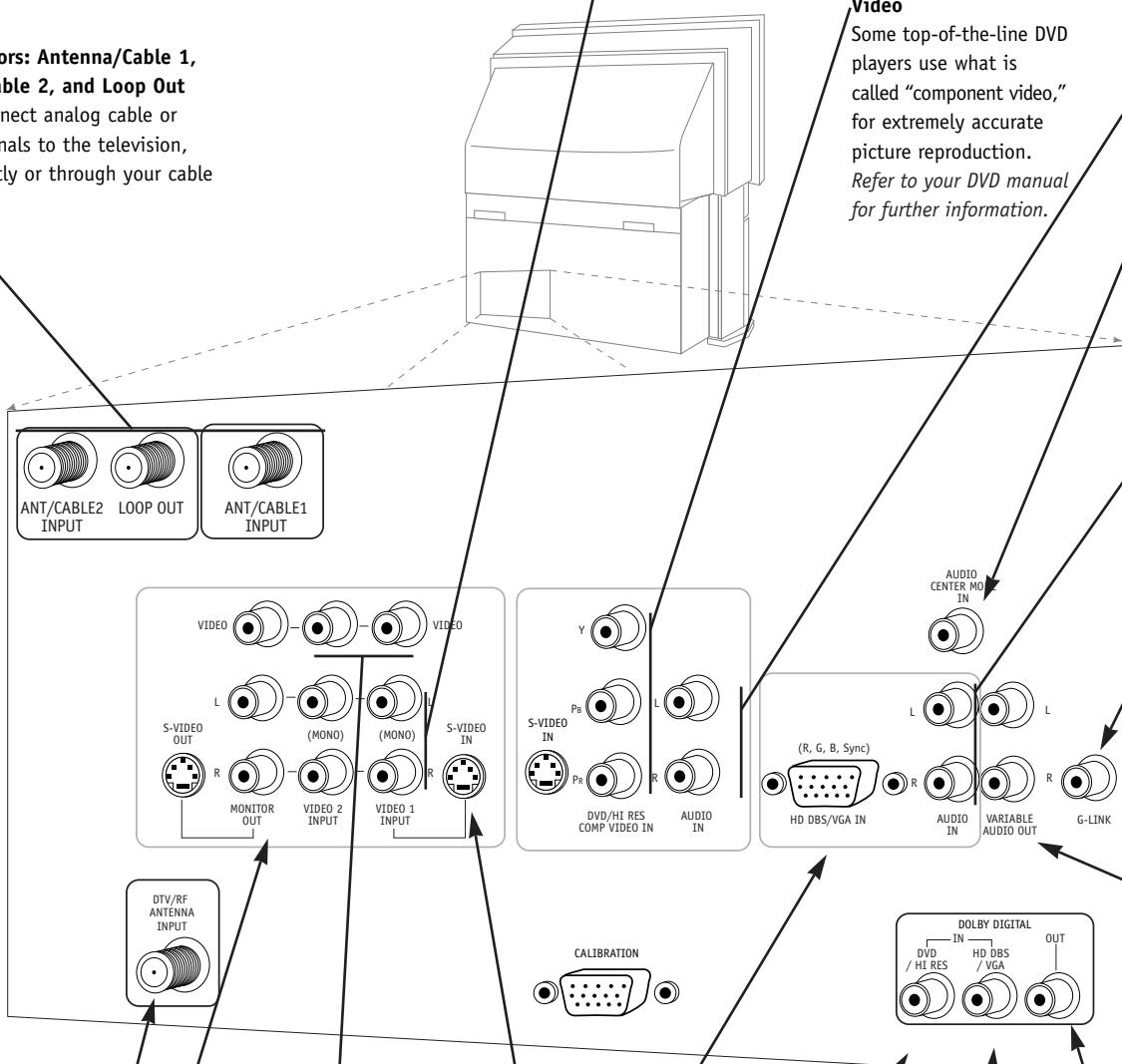
Left/Right Audio
Used for stereo sound from various types of equipment.

Center Mode In
Connect to external Dolby Digital Center "preamp output."

VGA and DBS Audio Input
Used in audio connections for VGA and DBS input.

G-Link:
Used for connecting to Gemstar equipment.

Variable Out
Used to connect either an external amplifier, or add a sub-woofer to your surround sound system.



Mini glossary

JACK A connection on the back of a TV, VCR, or any other A/V device. This includes the RF jack and the Audio/Video jacks that are color-coded.

SIGNAL Picture and sound traveling through cable, or on the air, to your television screen.

Front Audio/Video Jacks

There are four jacks on the front of your Entertainment Machine that make connecting Audio/Video devices like video games and camcorders very simple.

The jacks are located behind the front panel that is opened and closed by the OPEN button on the panel.

The jacks are like those found in the jack pack on the back of your Entertainment Machine. This means that most equipment that connects to those types of jacks in the rear jack pack, can also be connected in front.

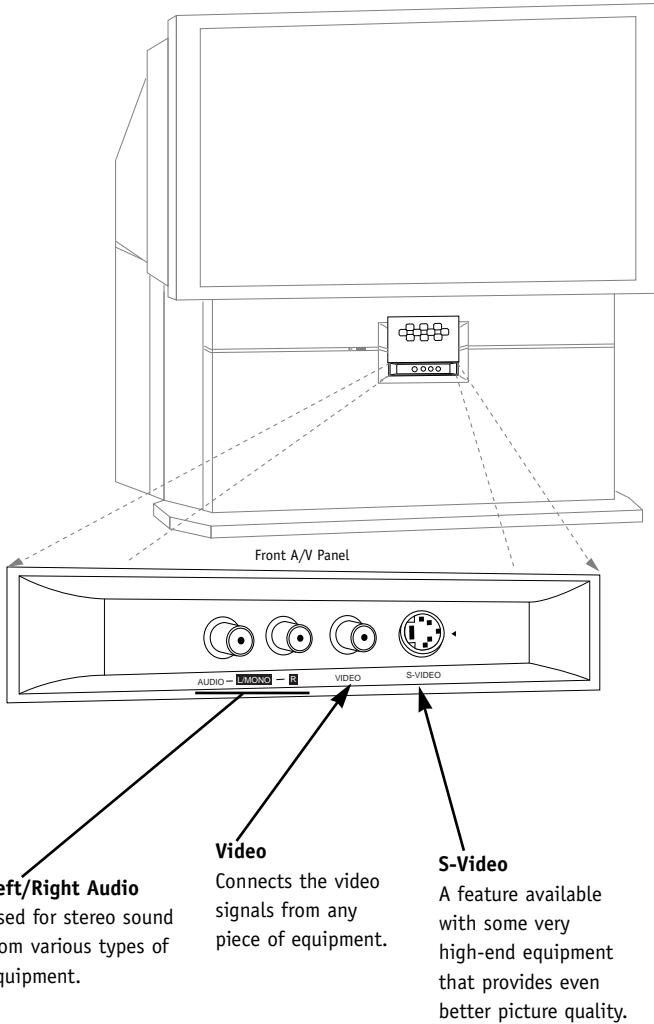
To use the front jacks as the signal source, use the Screen Source menu as described on page 30. They will be named "Front Video" in the Screen Source menu.



When you choose Front Video or Front S-Video, the audio is automatically changed as well.



If you're connecting a video game unit, make sure to change the picture settings with the Video Preset option in the Video menu (see page 38).



Mini glossary

A/V CABLES Audio/Video cables. Three cable connectors—Right audio (red), Left audio (white), and Video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

A/V DEVICE Any device that produces video or sound (VCR, DVD, cable box, or television).

DTV Antenna Hookup

1

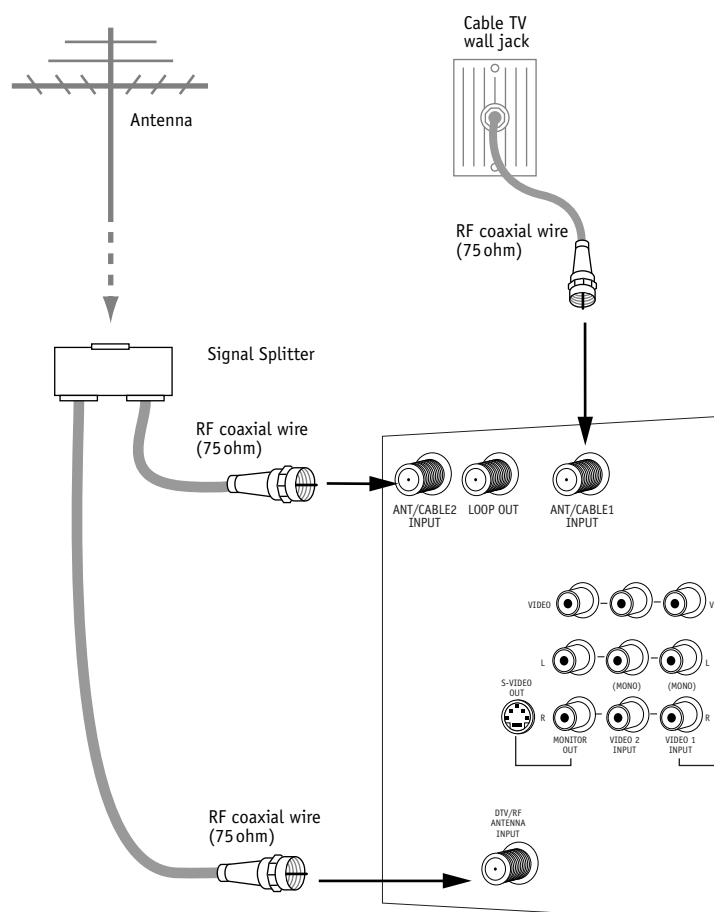
Connect the Entertainment Machine to your ATSC (DTV) compatible antenna as shown.

2

Turn to page 27 to tune your DTV antenna.

3

Turn to pages 26-27 to activate EZ Program for your analog signal and to tune your DTV antenna.



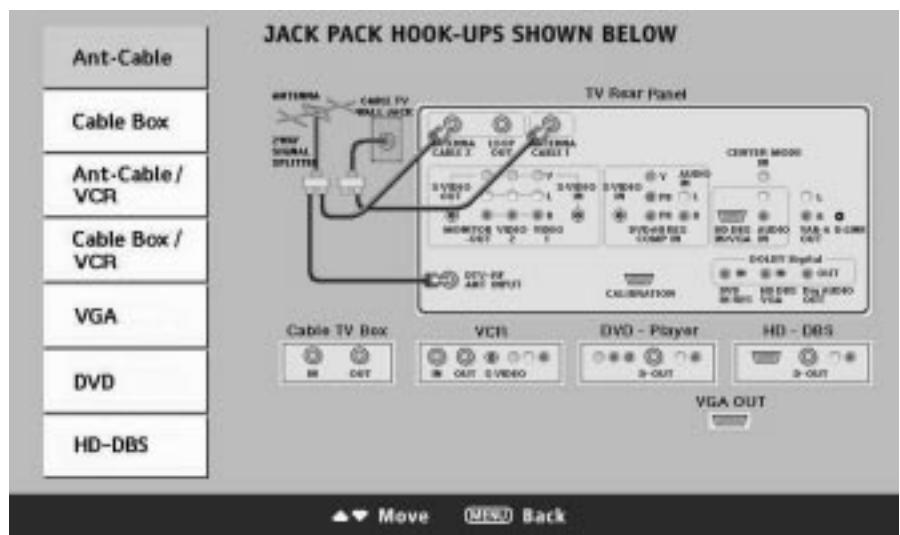
If you receive your RF signal through an antenna that is several years old and connects with two small prongs, you will need to purchase a 300 to 75 Ohm adapter. It should be available from your local electronics dealer.

Zenith recommends using a 75 ohm cable for your antenna connections in order to prevent interference.

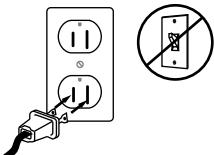
If you wish to use your antenna to receive both analog and digital signals, you will need to purchase a signal splitter. Please see on-screen setup guide on the following page.

For best performance, have your Antenna professionally adjusted.

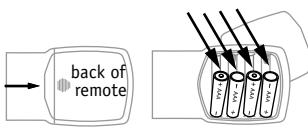
DTV Antenna Hookup (On-Screen Guide)



1 Plug in your Entertainment Machine into a 120V 60Hz outlet.



2 Remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

4 Press the MENU key so the Setup menu appears, and then press ENTER.

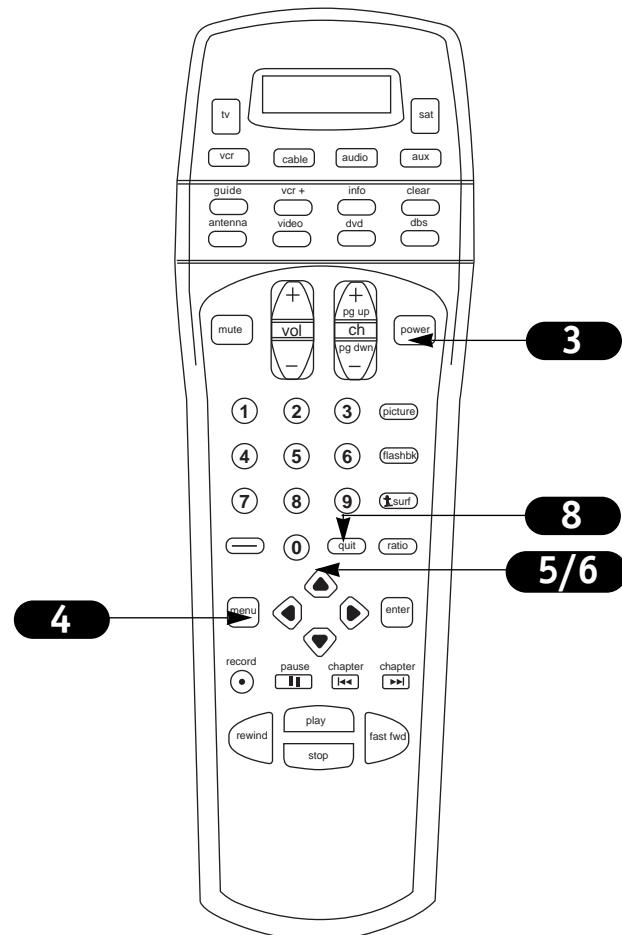
5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Hookup, then press ENTER.

7 Make your connections according to the diagram.

8 Press QUIT to exit the diagram.

9 Turn to pages 26-27 to activate EZ Scan for your analog signal and to tune your DTV antenna.



Cable Box

Some cable services require the use of a cable box to decode premium channels and pay-per-view. Using the Loop Out to Decoder option, and programming your remote, you can connect your cable box so that you only need your MBR remote to control all the channels. By connecting cable directly to your Entertainment Machine, then running it out to the cable box and back, you make the cable box another source to choose from in the Source selection on your remote.

1 Locate the Antenna/Cable 2 jack on the back of your TV. Connect the cable that runs from the wall directly to the jack. Now find the the Loop Out jack.

2 Connect the cable from this jack to the Input jack on the back of your cable box.

3 Locate the Output jack on the back of your cable box. Connect this to the Antenna/Cable 1 jack on the back of your TV.

4 To view the premium stations, set the channel number on your cable box to HBO, CINEMAX, SHOWTIME, etc. Then press the Antenna button on your remote and select the other Cable source (Ant/Cable 1).

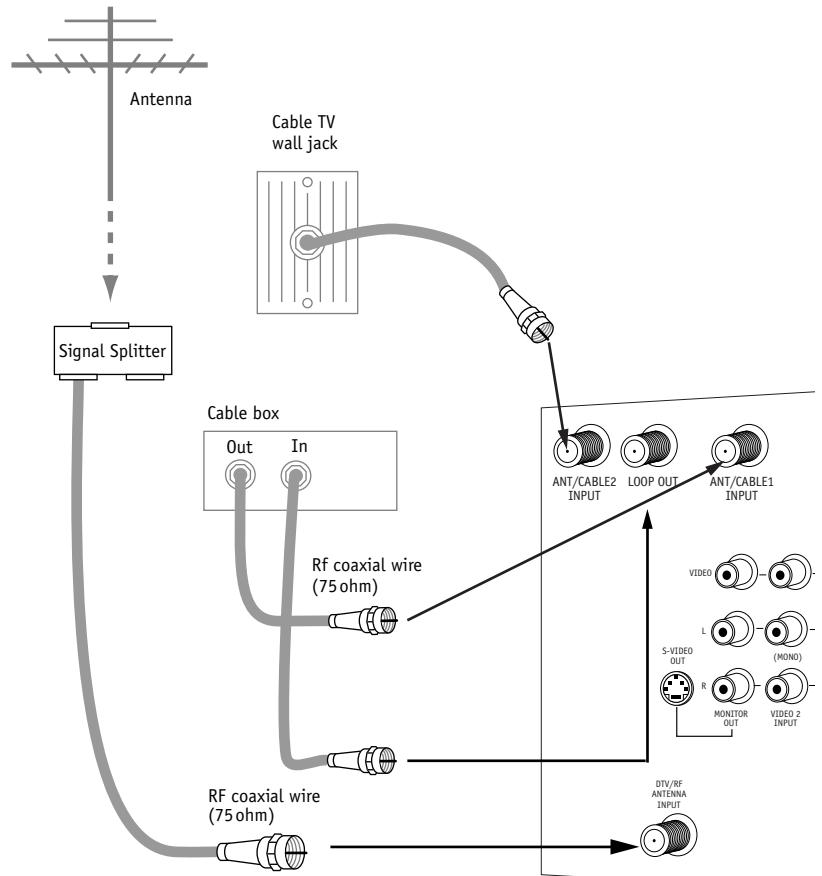
To view the non premium channels press the Antenna button and select Ant/Cable 2. Then run Auto Program to check for all available channels and store them in memory.

This can be combined with any other equipment you may want to hook up. Hook cable directly into the TV, then to the cable box. From there, the cable box goes to the next device, down the line, until the last piece, which connects back to the TV in the Antenna/Cable 1 jack.

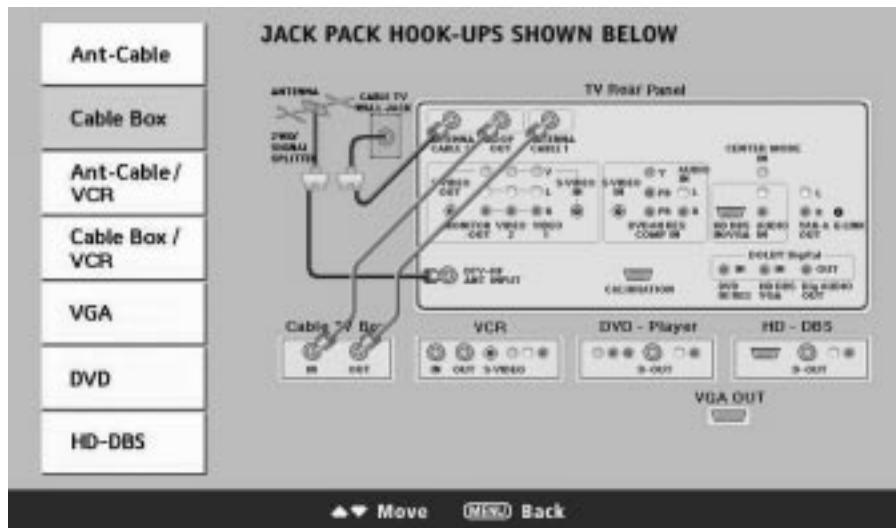
5 Turn to pages 26-27 to activate EZ Program for your analog signal and to tune your DTV antenna.



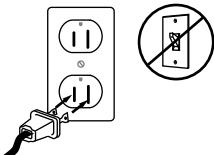
To receive premium channels, run Auto Program on the second source that is set to receive channels.



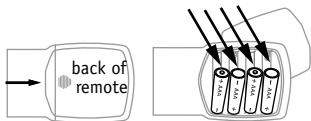
Cable Box (On-Screen Guide)



1 Plug in your Entertainment Machine into a 120V 60Hz outlet.



2 Remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

4 Press the MENU button so the Setup menu appears, and then press ENTER.

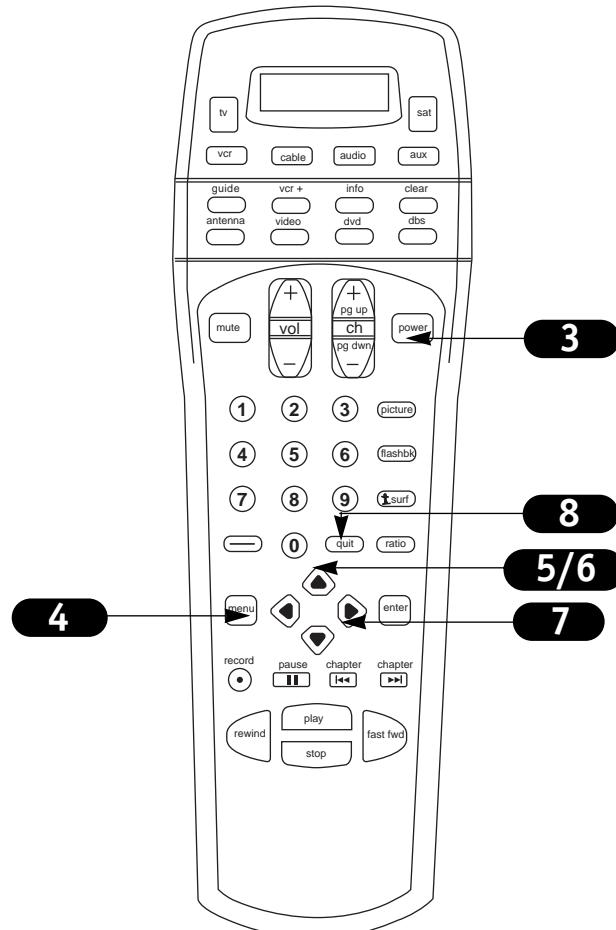
5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Hookup, then press ENTER.

7 Press an UP/DOWN arrow on the remote to view the CABLE BOX diagram (as shown above) and make your connections according to the diagram.

8 Press QUIT to exit the diagram.

Turn to pages 26-27 to activate EZ Program for your analog signal and to tune your DTV antenna.



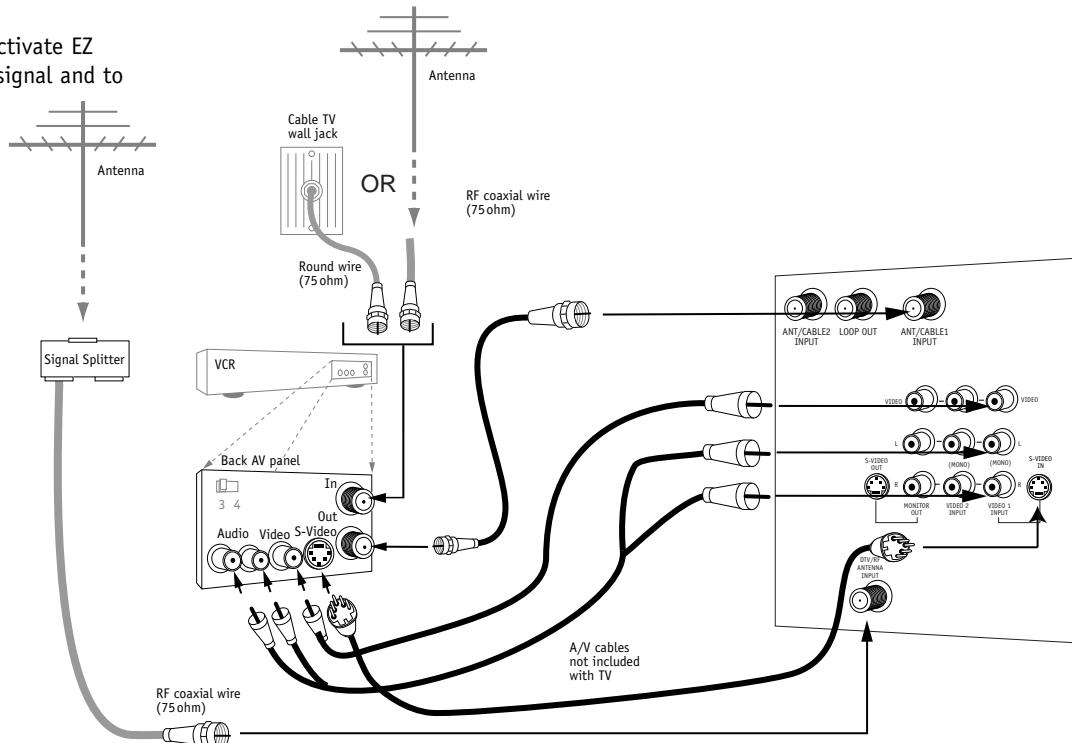
VCR

1 Locate the RF or VHF/UHF/CATV In jack on the back of your VCR. Connect the cable line coming from your wall directly to this jack.

2 Find the composite video and audio jacks on the back of your VCR, and connect them following the instructions provided with your equipment.

You may connect either the composite video or the S-Video cables to your Entertainment Machine. (Do not connect BOTH the composite and the S-Video cables. In the event that you connect both composite and the S-Video cables, only the S-Video will work.)

3 Turn to pages 26-27 to activate EZ Program for your analog signal and to tune your DTV antenna.

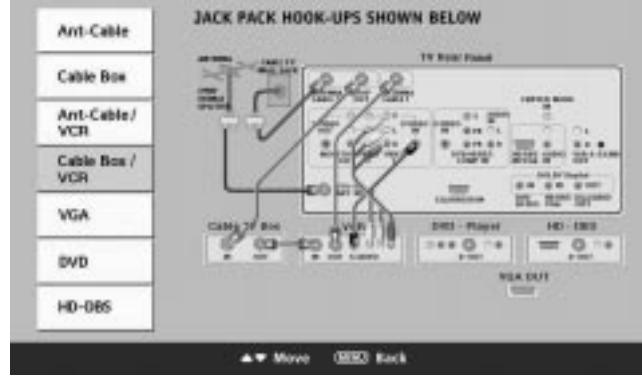
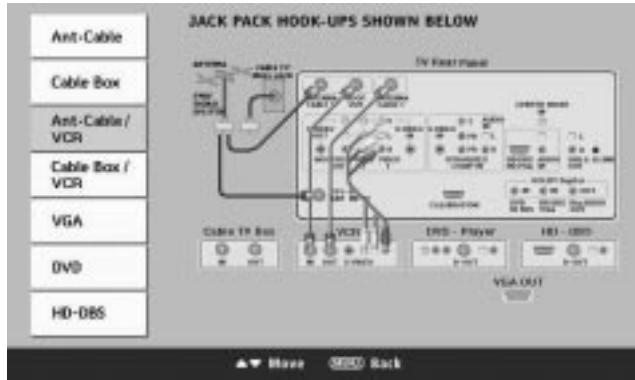


To hear stereo sound from cable or your VCR, you will need to connect A/V cables as well as the wire that runs from the VCR to your Entertainment Machine.

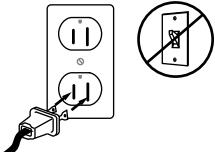


If you want to receive your signals on Channel 3 or 4, locate the Out to TV jack on your VCR. Connect a cable from the Out to TV jack to the Antenna/Cable 1 jack on the back of your Entertainment Machine.

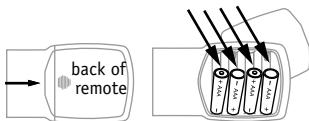
VCR (On-Screen Guide)



1 Plug in your Entertainment Machine into a 120V 60Hz outlet.



2 Remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

4 Press the MENU button so the Setup menu appears, and then press ENTER.

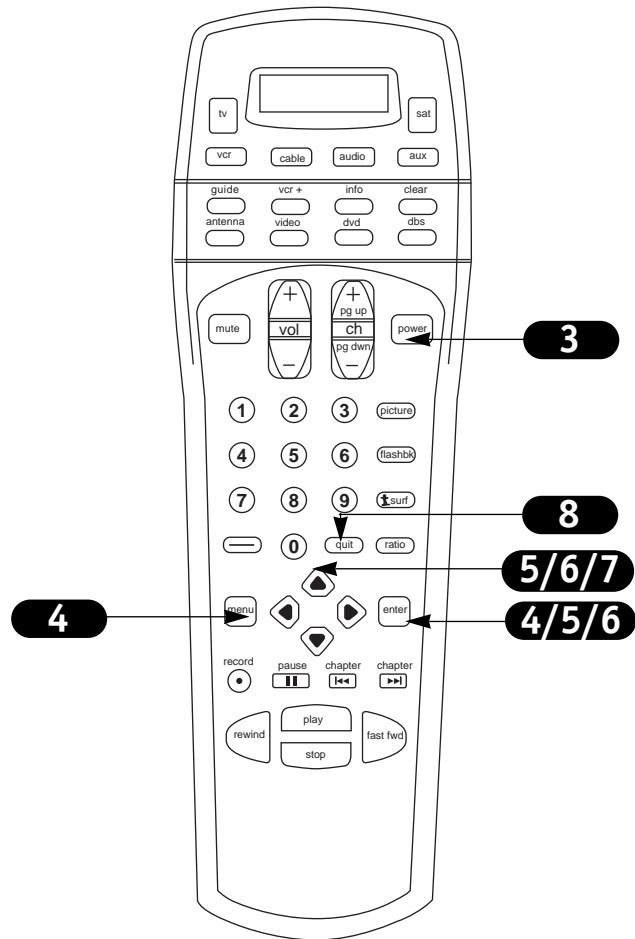
5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Hookup, then press ENTER.

7 Press an UP/DOWN arrow on the remote to view the ANT-CABLE/VCR or CABLE BOX/VCR diagram (as shown above) and make your connections according to the diagrams.

8 Press QUIT to exit the diagram.

9 Turn to pages 26-27 to activate EZ Program for your analog signal and to tune your DTV antenna.



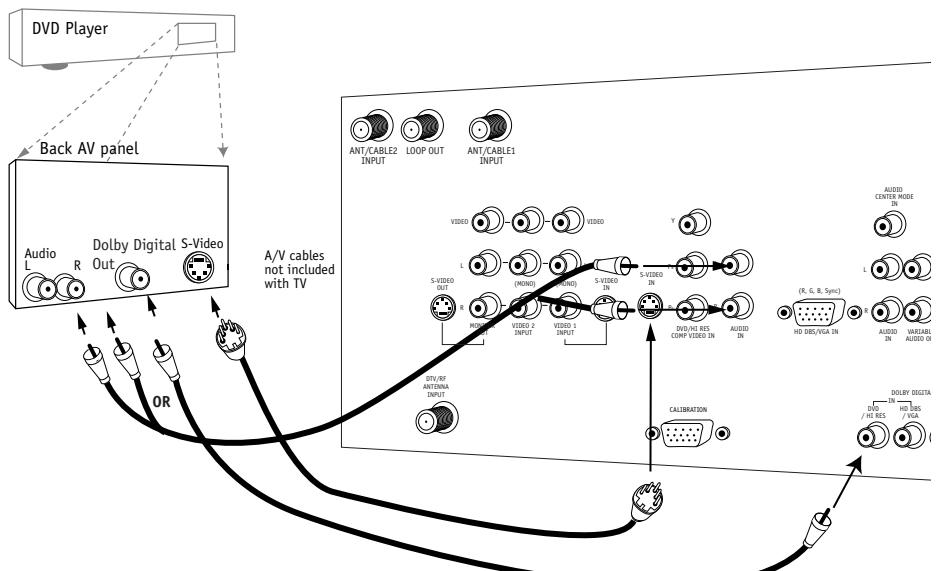
DVD Player

1

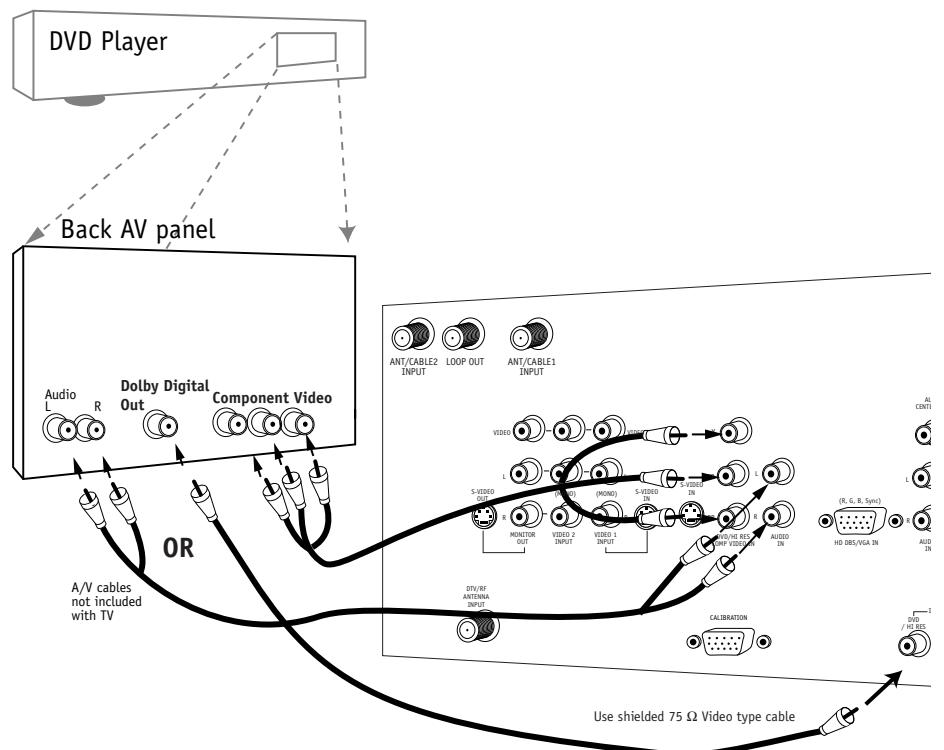
Find the audio and composite or S-Video jacks on the back of your DVD Player and connect them following the instructions provided with your equipment.

2

You may connect either the composite video or the S-Video cables to your Entertainment Machine. Do not connect both the composite and the S-Video.



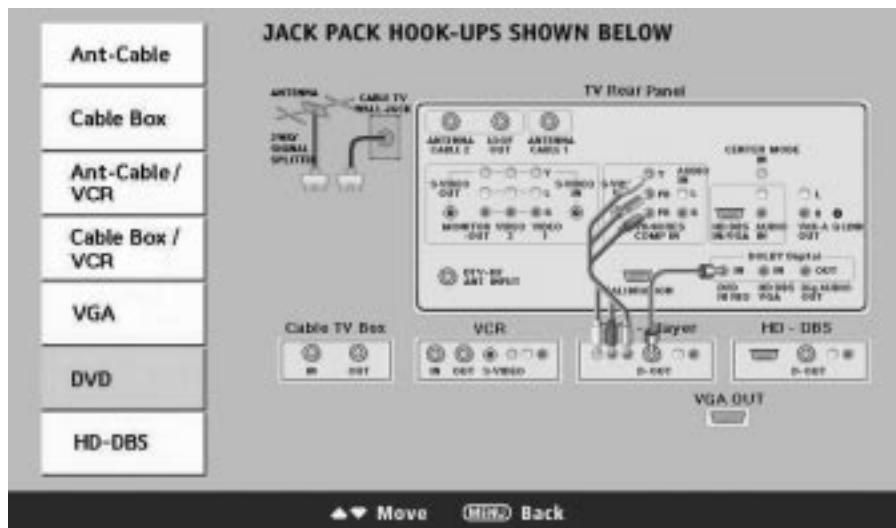
Some high-end DVD players use a picture reproduction system called "component video." If your DVD player has component output, use the connectors marked "DVD" on the jack panel. Please refer to your DVD manual for proper installation.



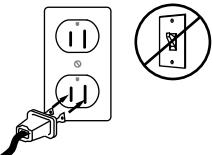
Mini glossary

COMPONENT VIDEO Some video equipment uses three separate lines (Y, Pb, Pr) to more precisely reproduce images. Your manual will explain how this relates to your equipment.

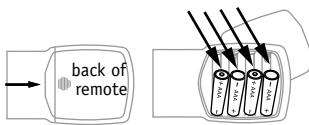
DVD Player (On-Screen Guide)



1 Plug in your Entertainment Machine into a 120V 60Hz outlet.



2 Remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

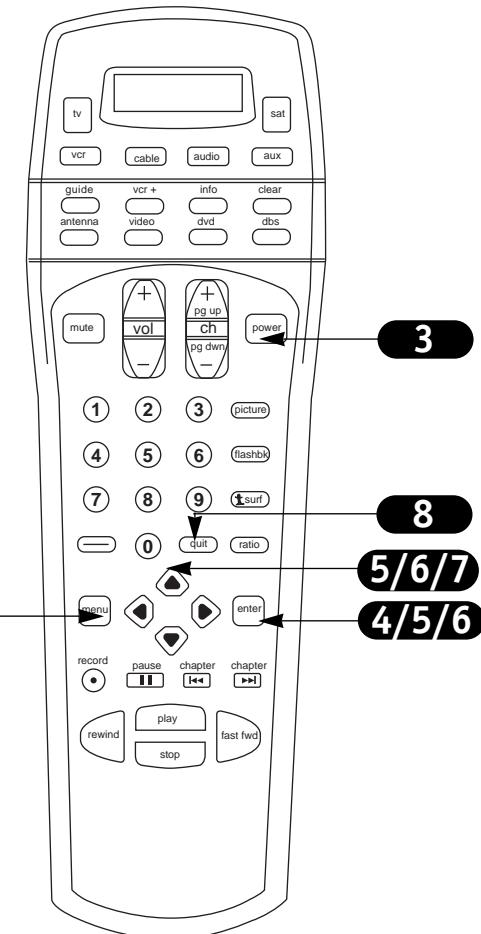
4 Press the MENU button so the Setup menu appears, and then press ENTER.

5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Hookup, then press ENTER.

7 Press an UP/DOWN arrow on the remote to view the DVD diagram (as shown above) and make your connections according to the diagram.

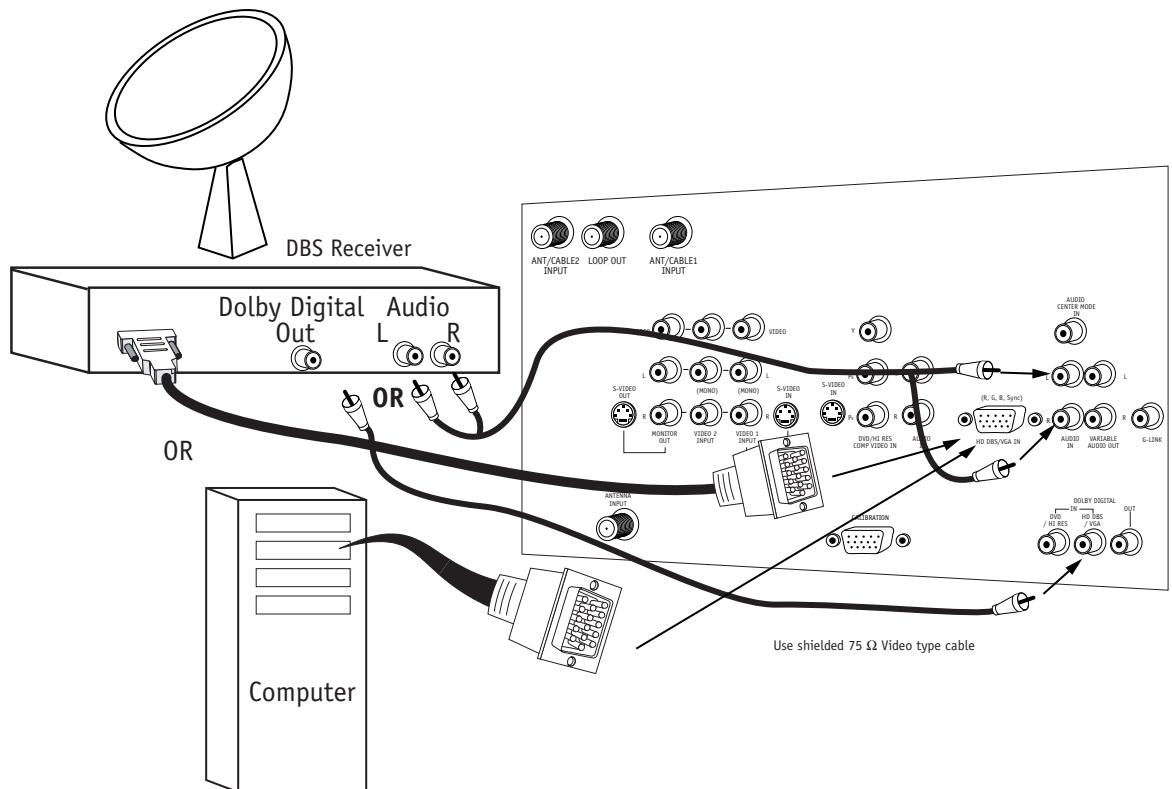
8 Press QUIT to exit the diagram.



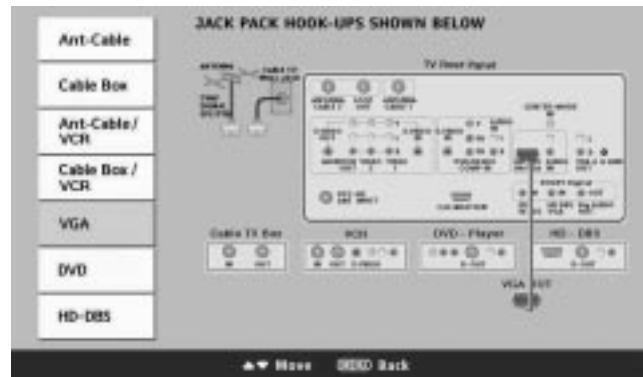
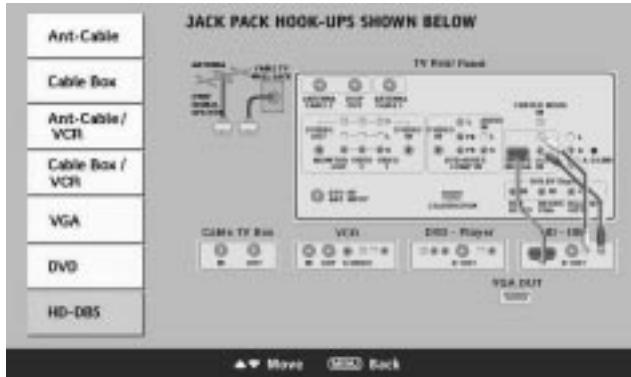
DBS and VGA Hookup

1 Find the audio and VGA jacks on the back of your DBS receiver (or Computer) and connect them following the instructions provided with your equipment.

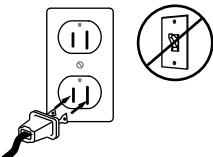
2 Connect these cables to your Entertainment Machine as shown.



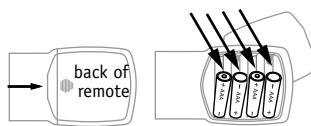
DBS and VGA Hookup (On-Screen Guide)



1 Plug in your Entertainment Machine into a 120V 60Hz outlet.



2 Remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

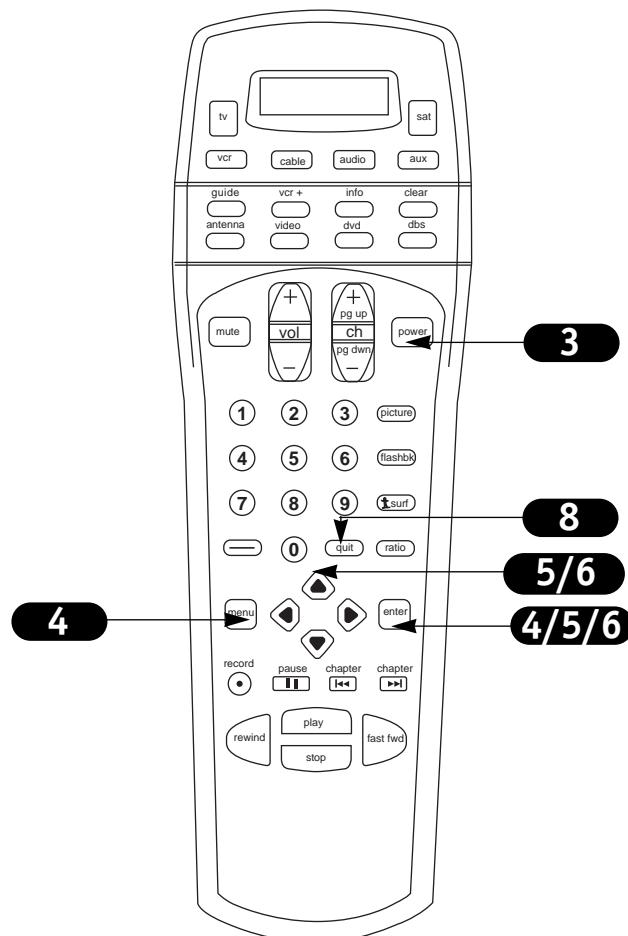
4 Press the MENU button so the Setup menu appears, and then press ENTER.

5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Hookup, then press ENTER.

7 Press an UP/DOWN arrow on the remote to view the HD-DBS or VGA diagrams (as shown above) and make your connections according to the diagrams.

8 Press QUIT to exit the diagram.



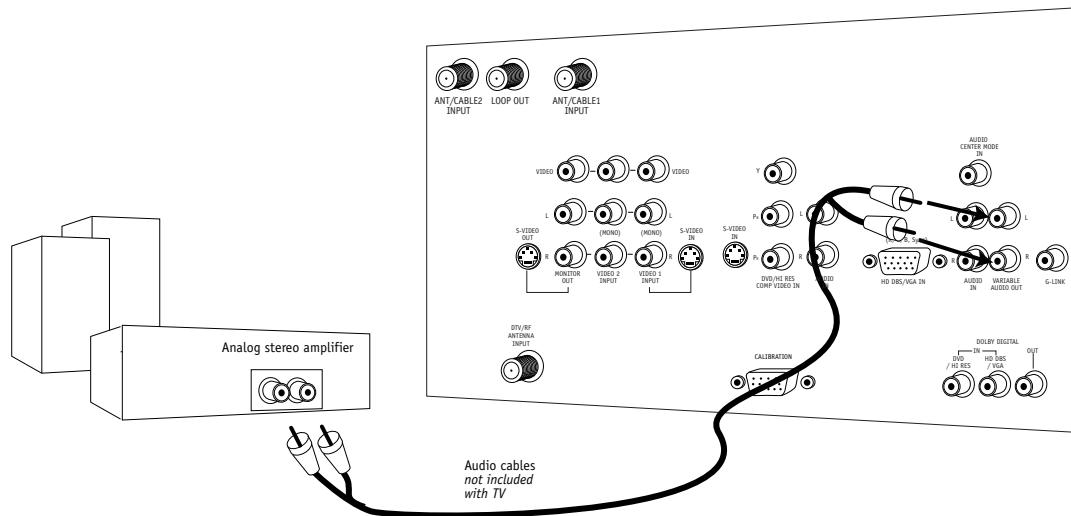
External Stereo

Hook up Left/Right Front Speaker to Amplifier System.

1
Locate the Variable Audio Out jacks on the back of your Entertainment Machine and the Input jacks on the back of your stereo's amplifier.

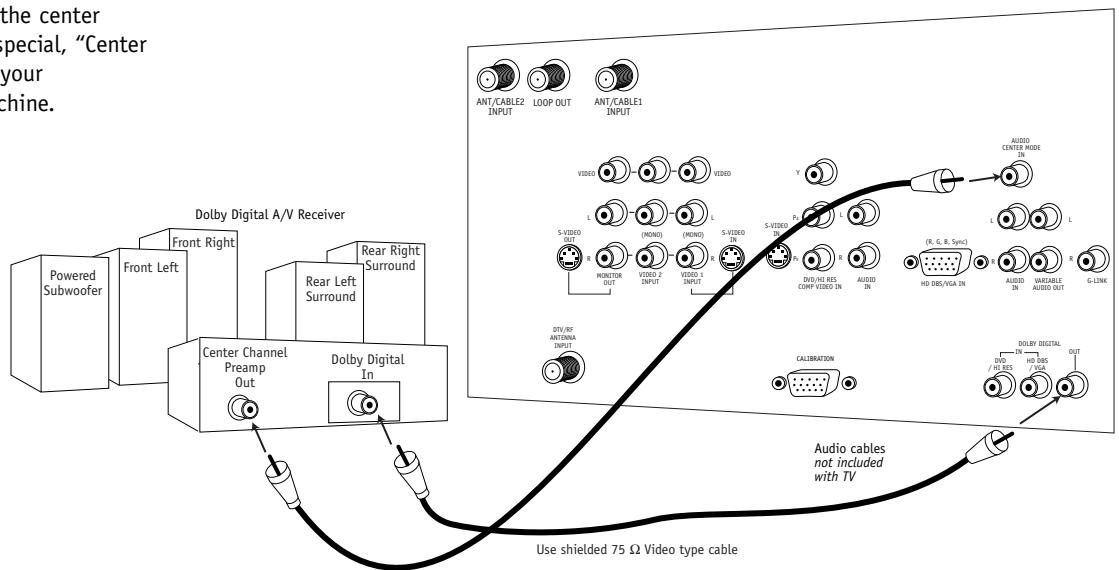
2
Connect the two jacks, making sure that the right and left channels are placed correctly.

3
Set up your speakers through your stereo, according to those directions.



Dolby Digital Audio Hookup

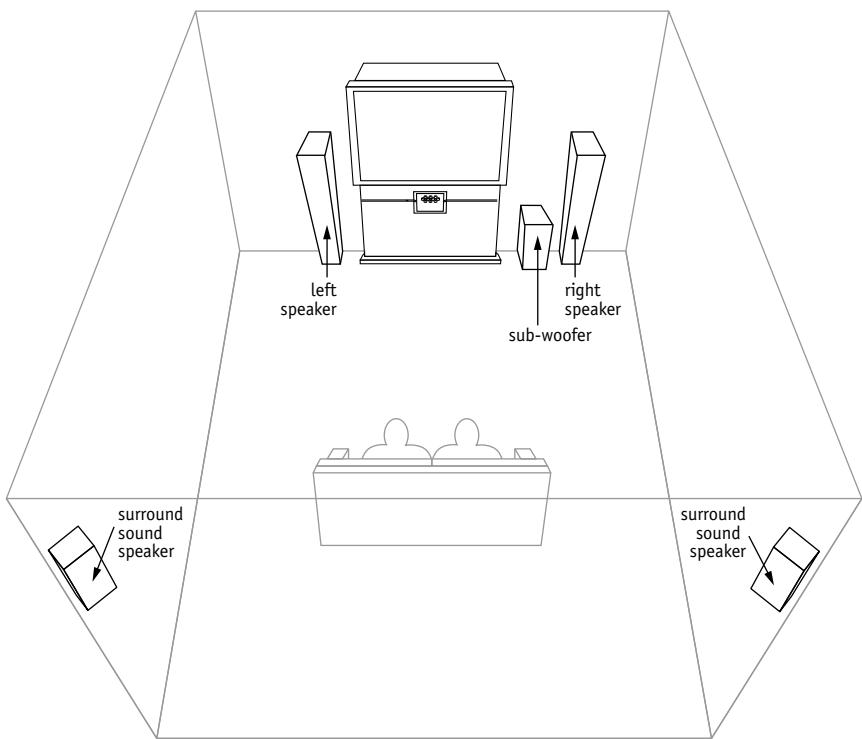
- 1 Locate the Dolby Digital Output jacks on the back of your Entertainment Machine and the Input jacks on the back of your Dolby Digital Receiver.
- 2 Connect the two jacks, as shown.
- 3 Set up your Dolby Digital Receiver according to the directions provided with that device.
- 4 If you wish to use your Entertainment Machine as the "center channel" for your Home Theater, re-direct the center channel into the special, "Center Mode In" jack on your Entertainment Machine.



Room Setups for Home Theater

This is just a general room design. Any number of set-ups are possible, and some changes may be needed to maximize your sound. However, a Dolby Digital Receiver is needed for 5.1 channel audio.

A left and right speaker on either side of the set enhances separation. The Entertainment Machine "center mode in," makes the dialog sound as though it's coming directly from the Entertainment Machine. The rear surround sound speakers provide the majority of other sounds, like those from special effects in movies. Your sub-woofer generates ultra-low frequency sound, for rumbling low-end audio.



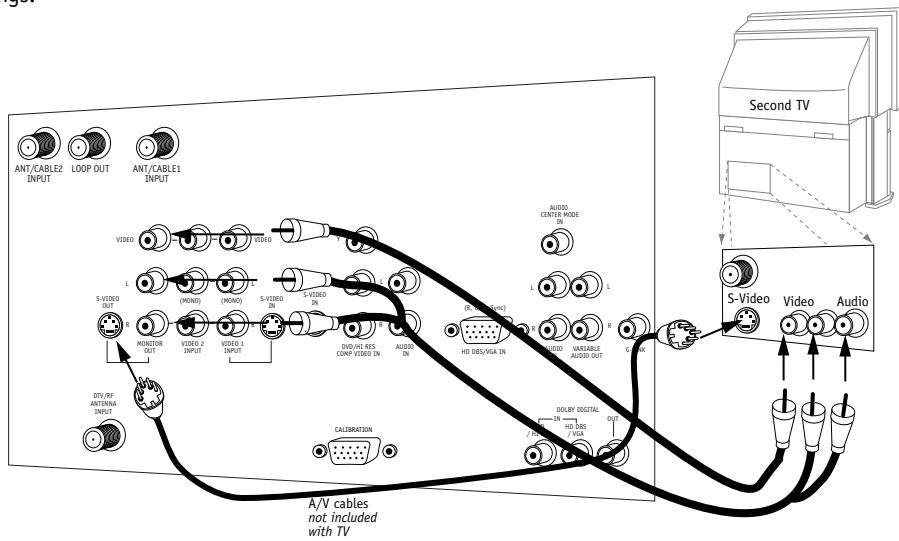
Sound is affected by speaker placement, so make sure nothing is in front of the speakers, and that they are aimed in appropriate directions.



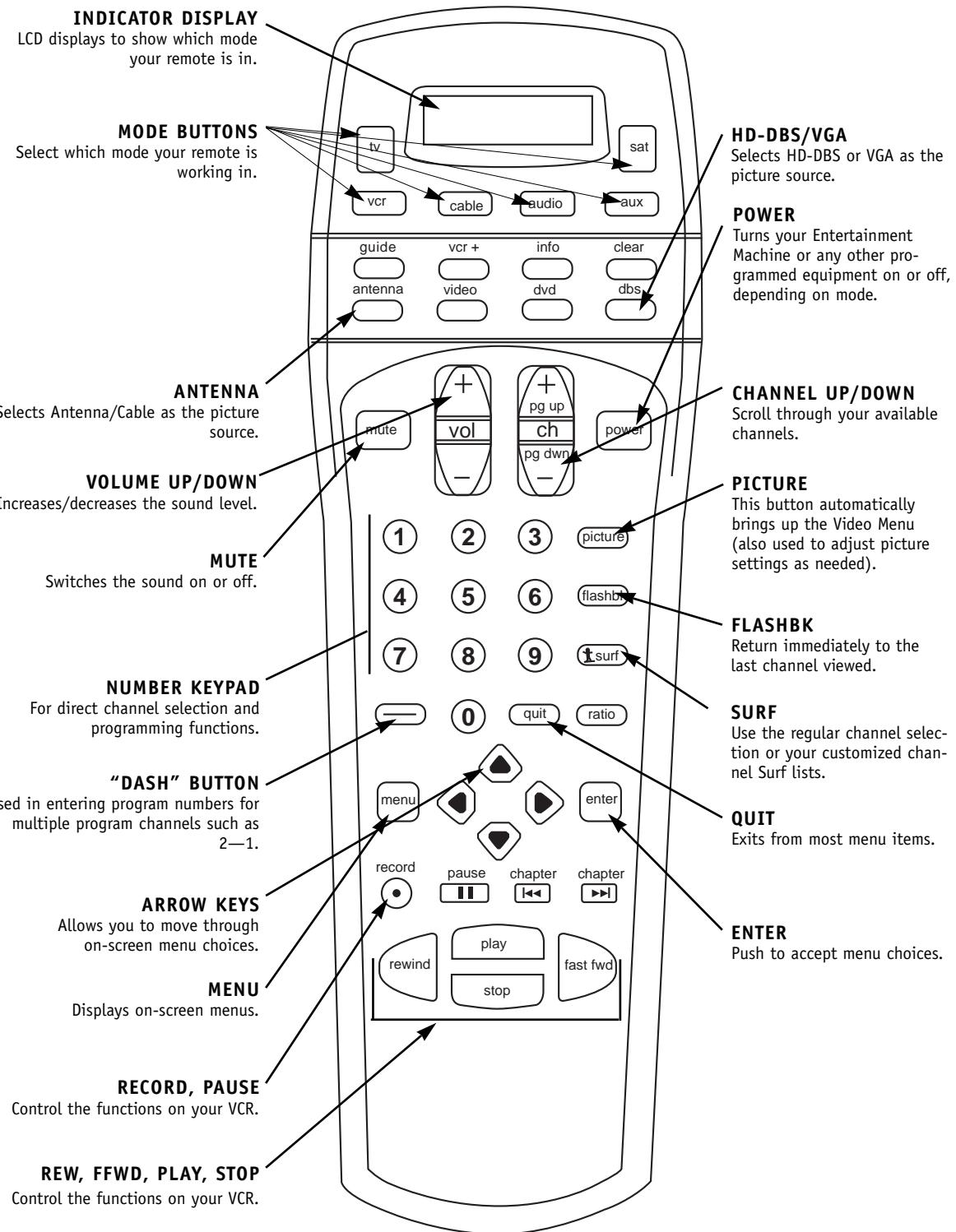
You have the option of turning on or off the internal speakers.

Monitor Out

- 1 Your Entertainment Machine has a special feature which allows you to hook up a second TV or monitor.
- 2 Just connect the second TV or monitor using the OUT Audio/Video jacks located on the back of your Entertainment Machine. See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.



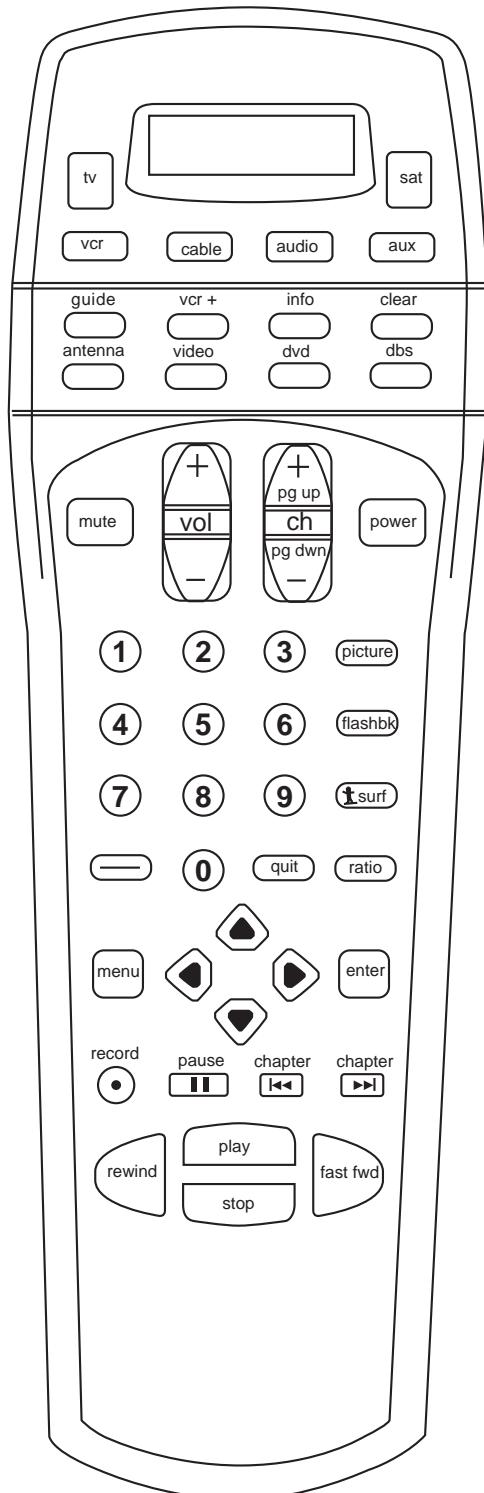
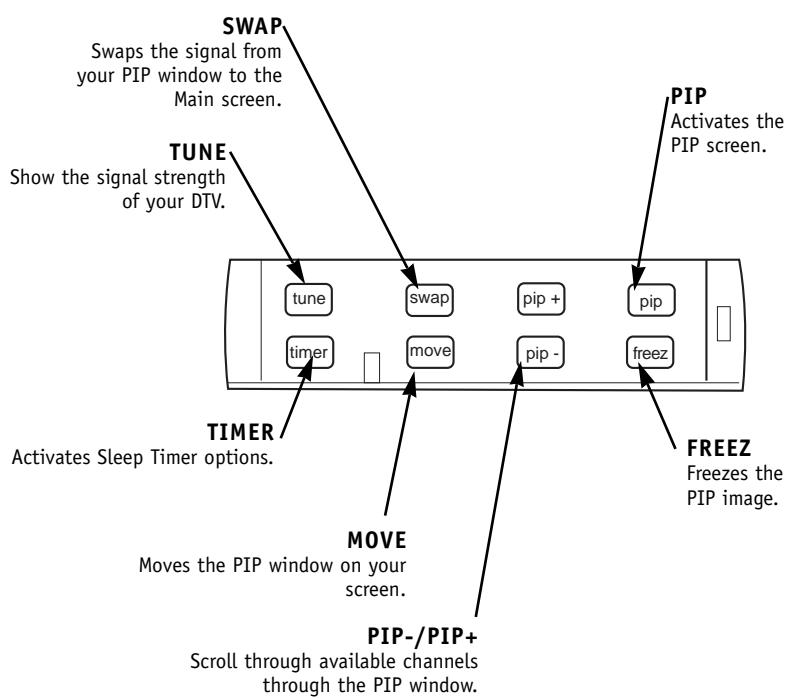
Button functions on your Remote



Remote Control Model Number
MBR3680Z

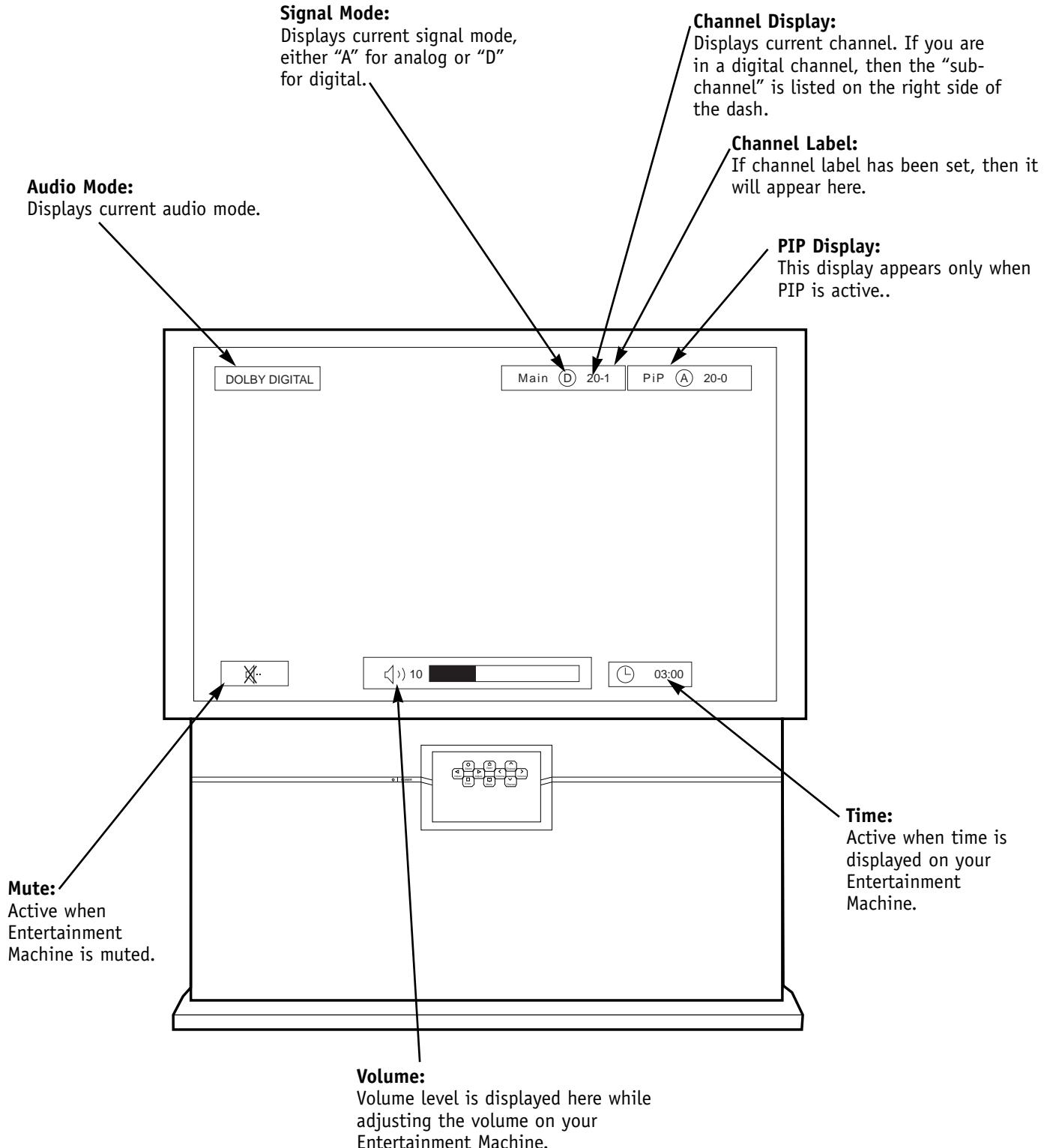
*A digital broadcaster can transmit multiple programs on a single channel. These programs are distinguished by a unique "sub-channel" number, separated when entering digits by the DASH button on the remote.

Button Functions on your Remote (con't)



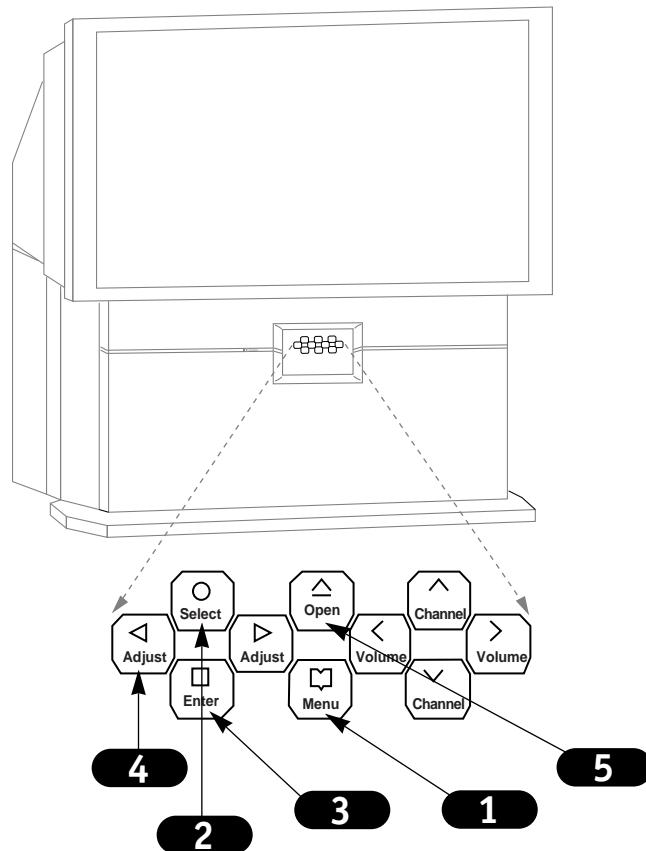
On-Screen Display

This page describes your on-screen display options.



Front Panel Controls

- 1** To access the menus, push the MENU button on the panel.
- 2** Use the SELECT button as the UP/DOWN arrow buttons on your remote.
- 3** Use the ENTER buttons as the ENTER buttons on your remote.
- 4** Use the ADJUST LEFT/RIGHT buttons as the LEFT/RIGHT arrow buttons on your remote.
- 5** Use the OPEN button to open and close the front panel for connecting Audio/Video devices to your Entertainment Machine.



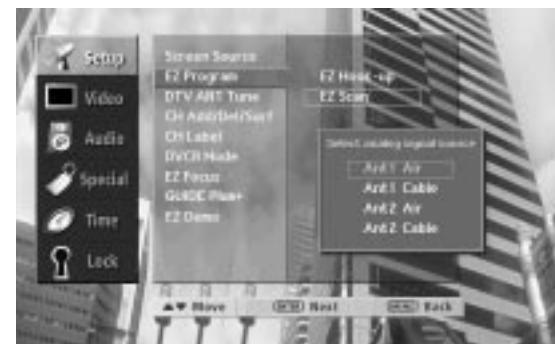
Refer to the various pages on how to use the on-screen menus.



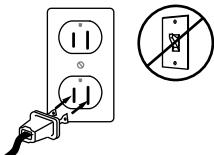
The POWER, CHANNEL and VOLUME buttons work just as they do on your remote control.

EZ Scan Setup

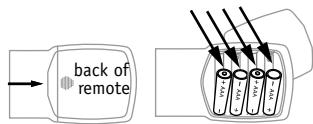
Use EZ Scan to automatically find and store all of the stations available in your area.



1 Use pages 8-17 to hook up your Entertainment Machine. If you have not done so, plug in your Entertainment Machine into a 120V 60Hz outlet.



2 If you have not done so, remove the back of the remote and put in four AAA batteries. Make sure batteries are properly installed (check the +/- signs).



3 With the remote control in hand, press the POWER button to turn on your Entertainment Machine.

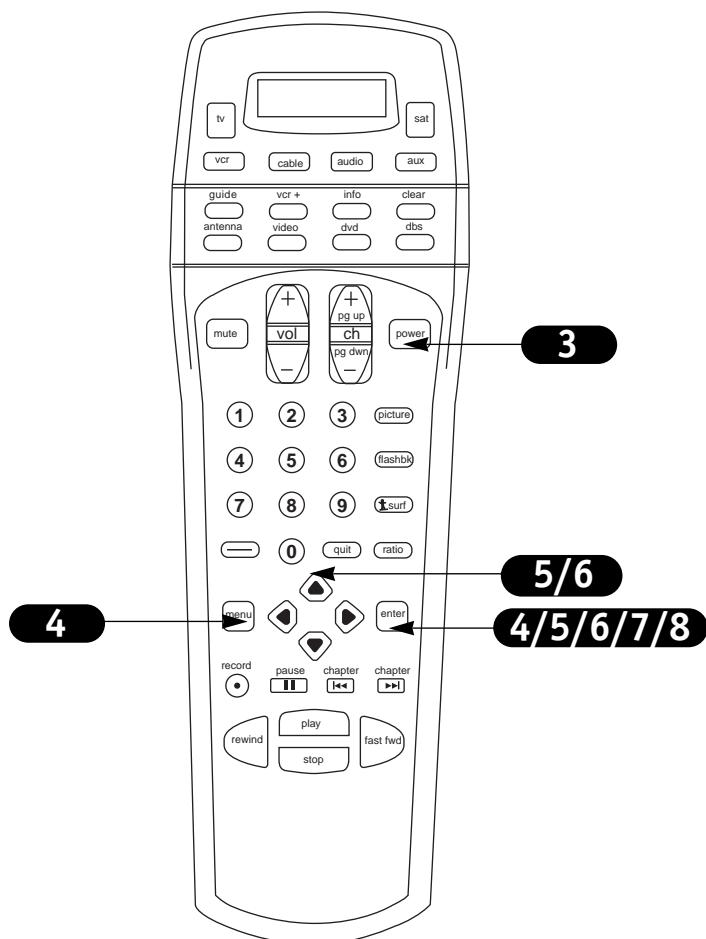
4 Press the MENU button so the Setup menu appears, and then press ENTER.

5 Using the UP/DOWN arrow on the remote control, select EZ Program on your screen and then press ENTER.

6 Press UP/DOWN button to select EZ Scan, then press ENTER.

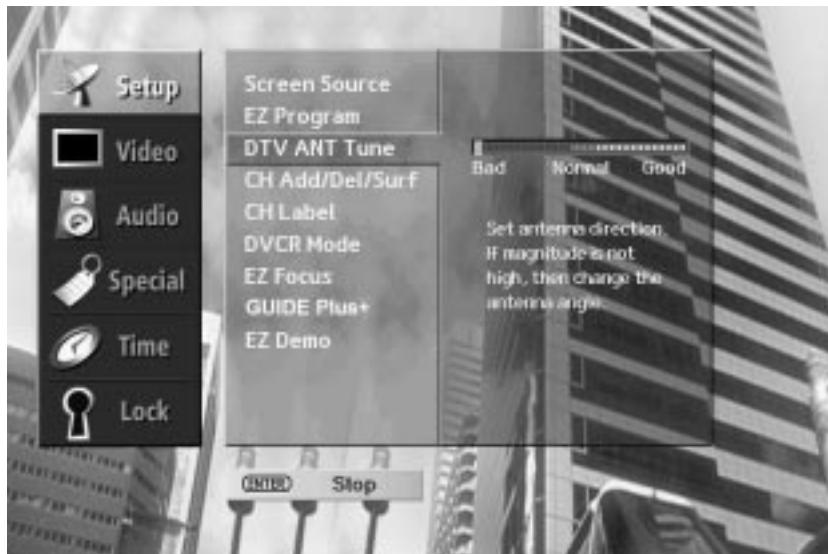
7 Press ENTER to begin EZ Scan.

8 Press ENTER to stop EZ Scan.



DTV Antenna Tune

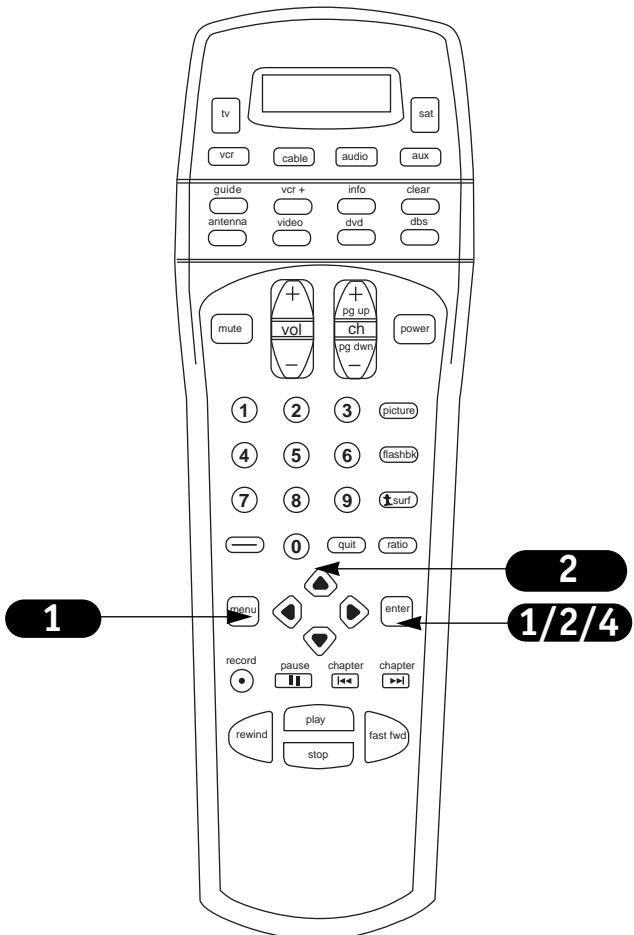
This feature lets you know how strong your DTV signal is and whether you need to adjust your antenna.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.
- 2** Use the UP/DOWN arrows to select DTV Antenna Tune and then press ENTER.
- 3** Follow the directions given on screen, adjusting your antenna if necessary.
- 4** Press ENTER to return to TV viewing.

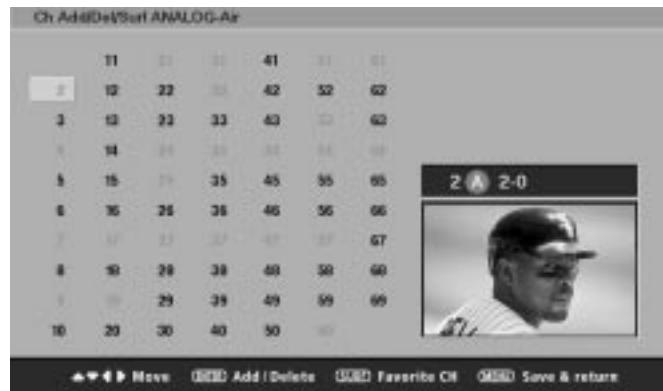
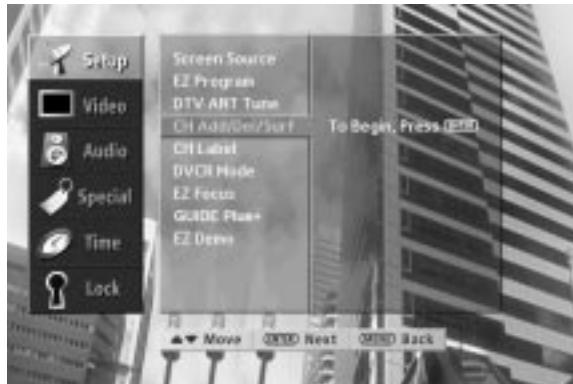


Not all areas or programs are currently available in the DTV signal.

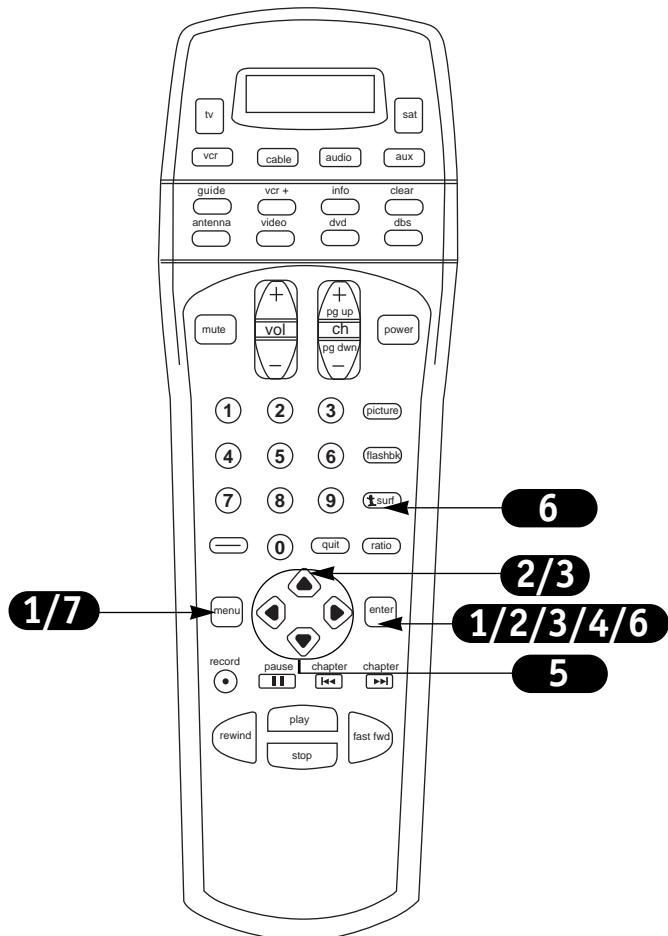


Channel Add/Delete/Surf

Create your own channel selection for channel surfing.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.
- 2** Use the UP/DOWN arrows to select Channel Add/Del/Surf and then press ENTER.
- 3** Use the UP/DOWN arrows to choose from the available modes (Analog or Digital) to Add or Delete channels. Press ENTER to make your selection.
- 4** Press ENTER to access the Channel Add/Delete/Surf screen.
- 5** You will now see a screen filled with numbers and a preview screen. Use the UP/DOWN and LEFT/RIGHT arrows to select any given channel.
- 6** Press ENTER to add or delete the channel from memory. Press SURF on the remote control to add the channel to your Surf list (a small Surfer icon will appear in front of the channel).
- 7** Press MENU to return to the Setup Menu.



Channel Labels

Choose preset labels for your channels.



1 Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.

2 Use the UP/DOWN arrows to select Channel Label and then press ENTER.

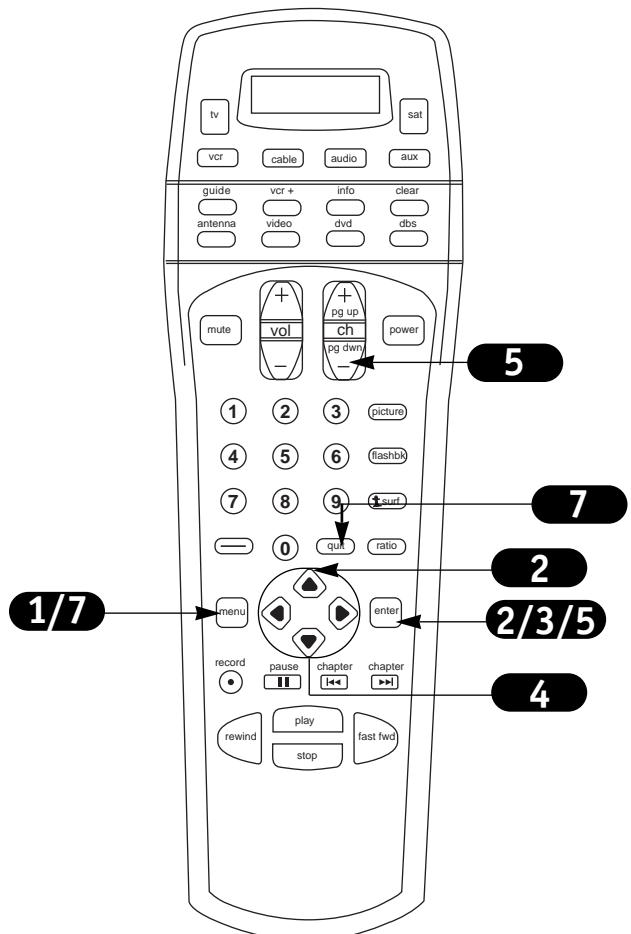
3 Press ENTER to access the Channel Label screen.

4 You will now see a screen filled with labels and a preview screen. Use the UP/DOWN and LEFT/RIGHT arrows to select the appropriate label for your channel.

5 Press Channel UP/DOWN on your remote to select the next channel to label and press ENTER to set the label to the selected channel.

6 Repeat steps four and five until all channels are labeled.

7 Press QUIT to save and return to TV viewing or press MENU to save and return to the Setup Menu.



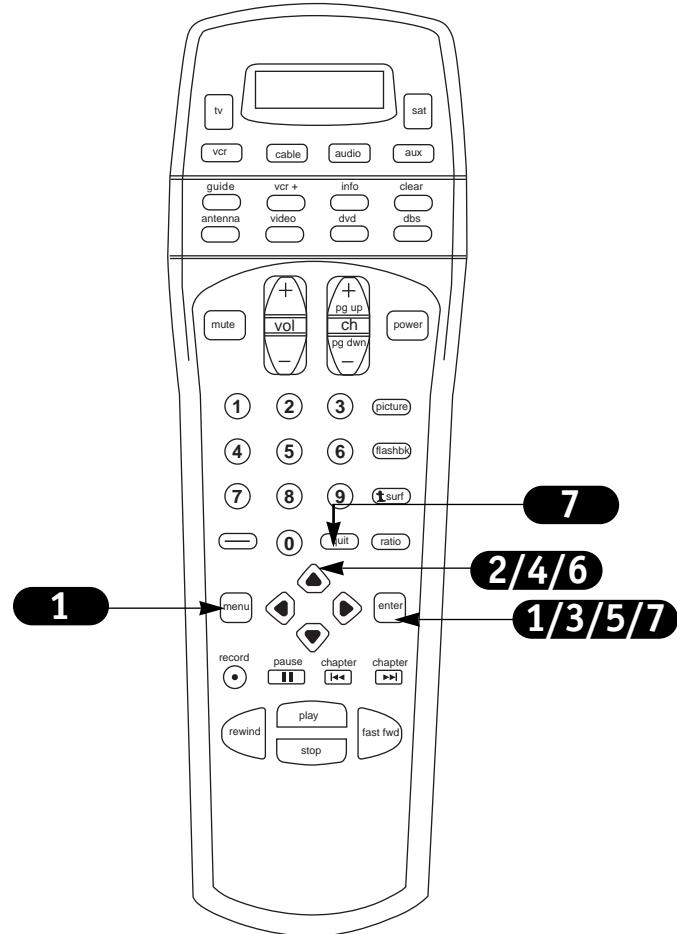
Screen Source

Choose the sources for your main picture and PIP.

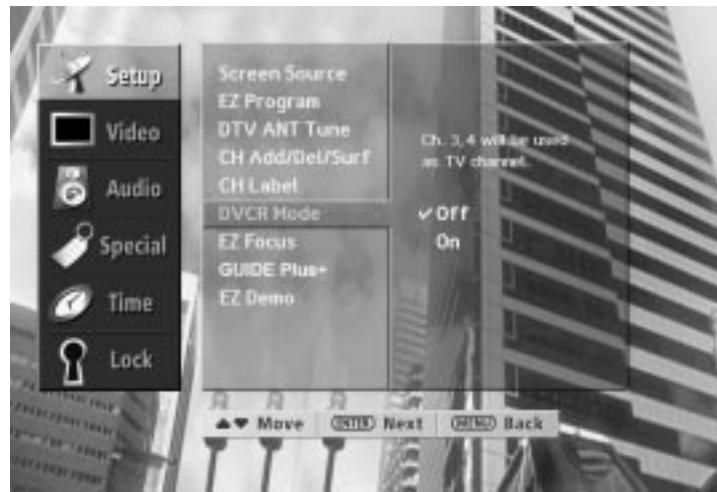


This menu is where you switch input source devices so you can watch your antenna, cable TV, VCR, DVD, or anything else that you have hooked up to your Entertainment Machine. Digital television signals will come through DTV-ANT. Analog antenna or cable will come through either Antenna/Cable 1 or Antenna/Cable 2, depending on how you set up your system. All other devices will correspond to the names of the jacks that they're connected to.

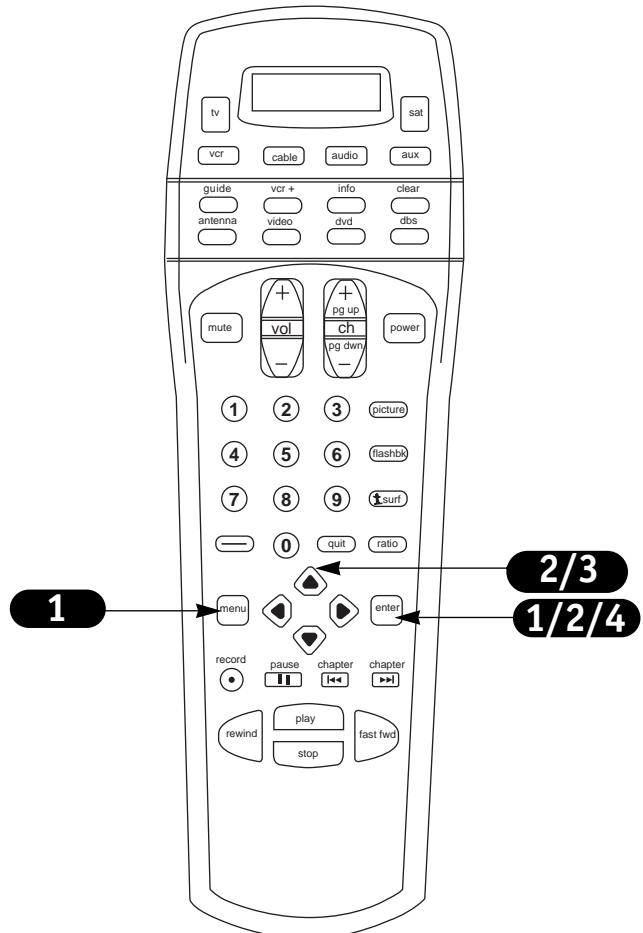
- 1** Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.
- 2** Use the UP/DOWN arrows to select Screen Source.
- 3** Press ENTER to access the Screen Source screen.
- 4** Use the UP/DOWN arrows to choose the source for your main screen.
- 5** To select the source for the PIP screen, first select DTV- ANT for the source of the Main screen, then press ENTER to access the menu for the PIP sources.
- 6** Use the UP/DOWN arrows to select the source for the PIP screen.
- 7** Press QUIT to save and return to TV viewing or press ENTER to save and return to the Setup Menu.



DVCR Mode



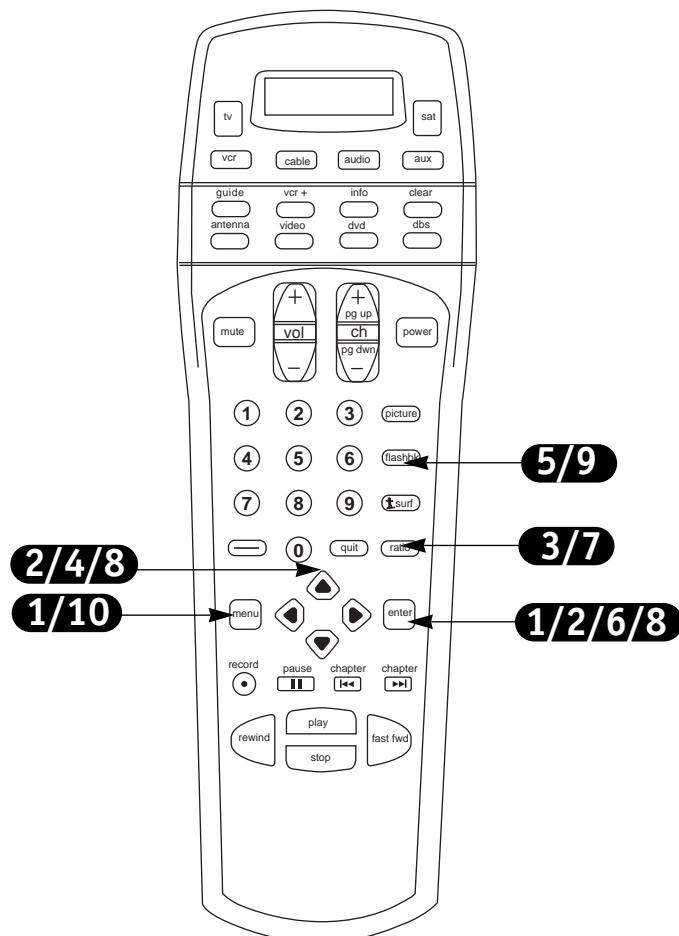
- 1**
Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.
- 2**
Use the UP/DOWN arrows to select DVCR Mode and then press ENTER.
- 3**
Use the UP/DOWN arrows to choose On or Off for the DVCR Mode.
- 4**
Press ENTER to return.



EZ Focus



- 1 Press the MENU button on the remote control so that the Setup menu appears, then press ENTER.
- 2 Use the UP/DOWN arrows to select EZ Focus and then press ENTER.
- 3 Press the RATIO button on your remote to toggle between Red and Blue. (Repeat step three for each color.)
- 4 Using the UP/DOWN and LEFT/RIGHT arrows, adjust the convergence of your Entertainment Machine.
- 5 Press FLASHBK on the remote to return to factory settings.
- 6 Press ENTER to save this position and continue to the next step.
- 7 Again, press RATIO to toggle between Red and Blue.
- 8 Press ENTER to toggle convergence mode and the RIGHT/LEFT and UP/DOWN arrows to adjust and move the convergence position.
- 9 Press FLASHBK on the remote to return to factory settings.
- 10 Press MENU to save and return to the Setup Menu.



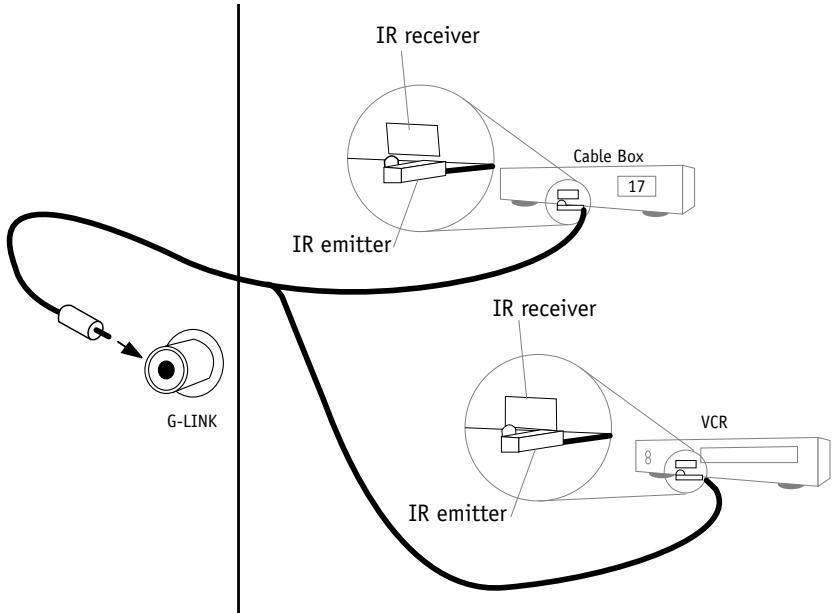
GUIDE Plus+ System Connection

1

Locate the jack marked G-Link.
This jack is for the IR
Cord connection. Insert the
connector into the G-Link.

2

Place the other end of the
cords with the IR (Infrared)
emitter sending units in
front of your VCR and Cable
Box in such a way as to
allow for an unrestricted
path for the IR signals to be
able to reach the front pan-
els of the VCR and Cable Box.
If necessary, peel off the
green protective strips from
the front and back of the IR
emitter to hold emitter in
proper location.



In order to receive the GUIDE Plus+ signal, it is necessary to connect your TV through the Antenna/Cable #1 jack on the rear of the TV.

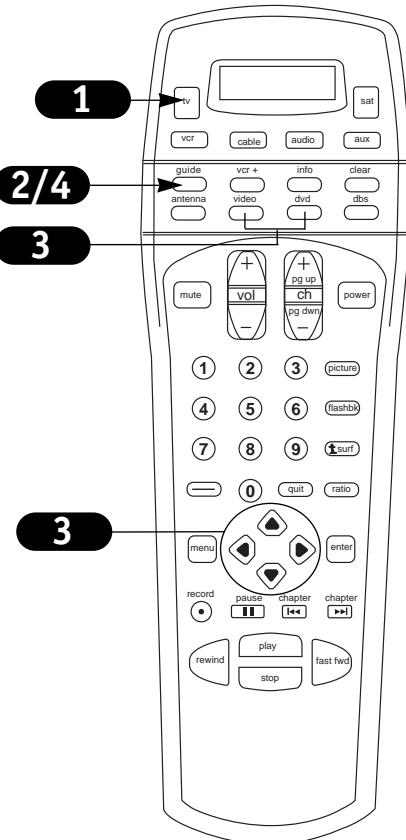
GUIDE Plus+ Watch/Record Menu

Schedules programs to be Watched and/or Recorded using the Program Grid Guide menu

(Note: You must first set up the GUIDE Plus+ system before you can schedule programs to be watched or recorded, see next page.)



- 1 Point remote at TV and press the TV button.
- 2 Press GUIDE to place Grid Guide on TV screen. (Follow on-screen instructions as instructed.)
- 3 Use the Up/Down/Left/Right arrows to pick a program on the Grid Guide you want to watch/record.
 - Watch: Press Blue Action Button (VIDEO) to schedule the program to be watched. (Blue button)
 - Record: Press Green Action Button (DVD) to schedule the program to be recorded. (Green button)
 - Press VCR+ button to go to the VCR Plus+ PlusCode recording menu.
- 4 Press GUIDE to return to TV viewing.



Mini glossary

GUIDE PLUS+	Multi-day listing of the programs scheduled to be broadcast in your area.
WATCH	TV will tune to program as it is broadcast.
RECORD	Program will be recorded as it is broadcast automatically.
VCR PLUS+	Recording using PlusCode programming number, usually listed with programs in Grid. Access by pressing INFO.

Setting up your TV to receive the GUIDE Plus+ system

Overview

GUIDE Plus+ is a feature that allows you to program your TV to:

Watch: TV will tune to the program automatically as it is aired. (If necessary, will turn TV on.)

Record: TV will tune cable box and/or VCR to the channel of the program and make the recording.

The feature also allows you to view on-screen the current program you are watching as well as to browse the other channels to see what else is being broadcast. Advanced features allow you additional options which are available when the Program Grid Guide is on the TV screen, like VCR Plus+ recording.

Get Information Ready for the EZ Setup

Prior to the GUIDE Plus+ feature setup, and the VCR and Cable box tests, you will need to have handy the following information:

- Your Zip or Postal Code.
- Whether you receive programs over-the-air, or subscribe to a cable service.
- Name on your cable box, if you have one.
- Name on your VCR, if you have one.
- Cable Box output channel number.

(Usually located on the back of the cable box. If not there see your cable box owner's manual or call your cable service provider for the number.)

Write in Setup Information

(Use a pencil.)

_____ Your Zip Code

_____ Name on your Cable Box

_____ Cable Box Output Channel

_____ Name on your VCR

Signal Reception: (Check one)

Over-the-Air Cable Service Subscriber

1

Preview GUIDE Plus+ Options

Go to the Special Features menu and highlight the GUIDE Plus+ option. Press the Right arrow on the remote.

In the "What would you like to do menu", select View Demo and press ENTER. You will see on-screen examples of the options available in the GUIDE Plus+ feature. Once you are familiar with the options available, select Setup.

Run GUIDE Plus+ Setup

With the Setup option highlighted, press ENTER.

Answer the questions using the answers you wrote in the Write in Setup Information box above.

Continue to fill-in the information on the Setup menus which will be used to run the Cable Box and VCR tests.

Cable Box Setup and Test

This test determines if the TV can control your Cable Box. Follow the on-screen instructions to set up your Cable Box.

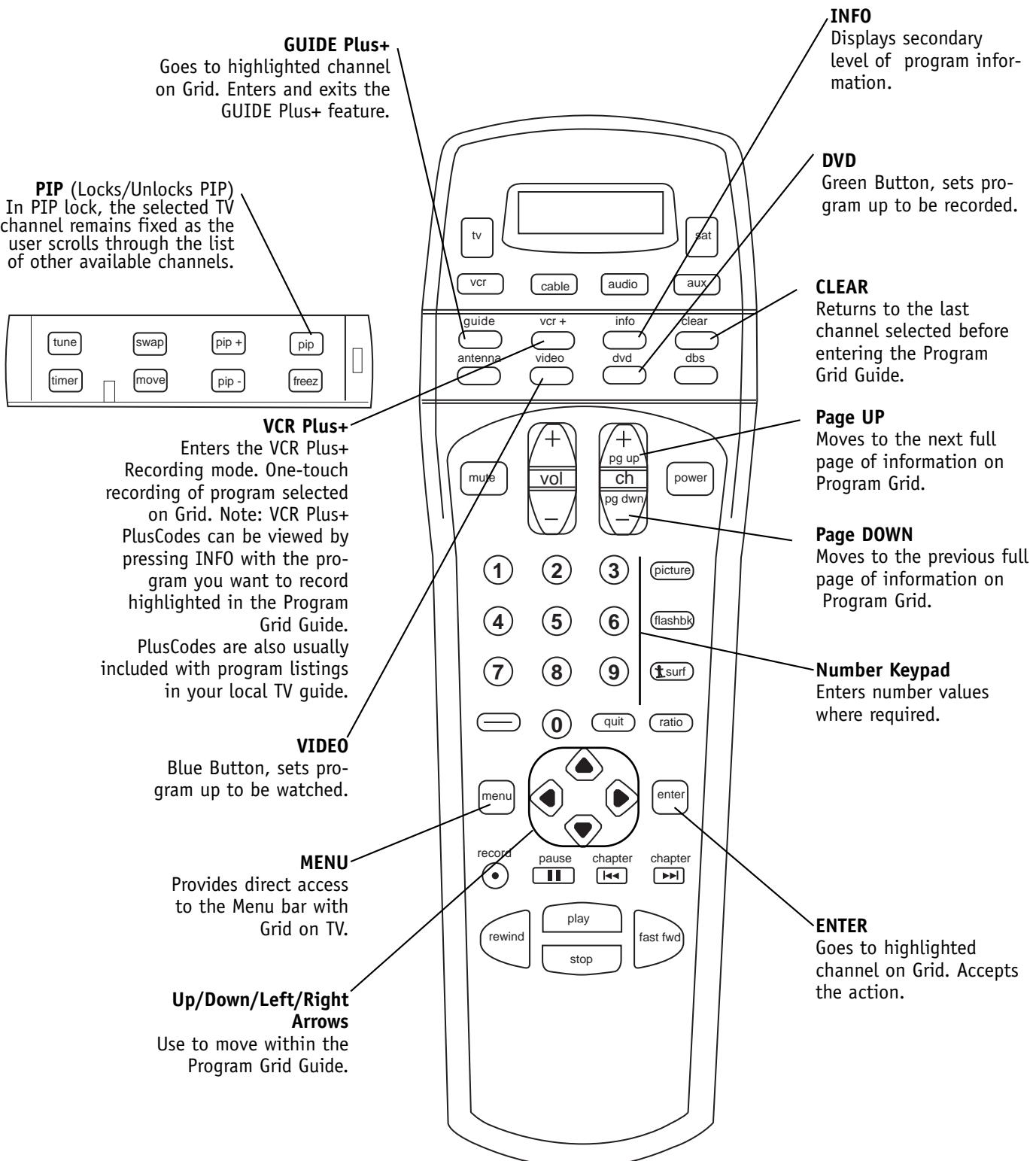
VCR Setup and Test

This test determines if the TV can control your VCR. Follow the on-screen instructions to set up your VCR.

Once the tests are complete, you can use the GUIDE Plus+ feature to view, schedule to watch, and schedule to record, the programs listed in the Program Grid Guide.

GUIDE Plus+ Remote Button Functions

What the remote control keys do in GUIDE Plus+ operating mode with Program Grid Guide on TV screen



GUIDE Plus+ Grid Guide Layout

Explains program Grid menu features in GUIDE Plus+ mode



Current Time

Shows current time.

PIP (Picture-in-Picture)

Live video of selected program, while user is scrolling the Program Grid. Click GUIDE to place this program on TV screen and exit Grid Guide. Using PIP Lock/Unlock button, picture in window can be locked, while user scrolls other programs in Grid, or unlocked, user can see the video of the highlighted program on the Grid (assuming the program is currently being broadcast).

Current or Upcoming Program Ads

Displays Ads for current and upcoming programs. You can choose to watch or record the programs shown here. Highlight this box, then press VIDEO (Blue) to Watch, or DVD (Green) to Record the program.

Action Bar

Watch: Automatically sets up the TV to tune to a program as it is broadcast. Press VIDEO (Blue) = Watch.
Record: Automatically sets up the VCR to record a program as it is broadcast. Press DVD (Green) = Record.

Info Box

With program highlighted, shows: Title of program; Gives a short description; Start time; Program duration; Channel number; Call letters of the channel; Indicates by displaying icons, if captions are present; Audio available; and Parental Control Ratings.

With the program highlighted, press the **INFO** button to expand the information box and display any available additional information, and the VCR Plus+ Recording PlusCode, if available. If still more info is available on additional screens, press **INFO** again to show them.

Menu Bar

Displays services and menus (Grid options) available by first highlighting the word **GRID**, then pressing the right arrow to scroll and access the additional options: Grid, Sort, Schedule, Messages, Editor, Setup. (See next page.)

Program Grid

Shows listing of current programs and channel icon, available with time of day to Watch or Record. Also shows last channel viewed. Channels are arranged in a predetermined order, which can be edited by using the Editor option on the Menu Bar.

Customize and edit your GUIDE Plus+ Grid menu and setup - - Troubleshoot problems

Record and Also Watch

Press VIDEO, DVD, or VCR+ twice to get additional recording times options and also to specify WATCH for the program you have scheduled to record.

VCR Plus+ Recording

Press VCR+ to record using the PlusCode programming number.

PIP Lock

Picture remains of original channel as other channels are selected.

PIP Unlock

Picture is shown of channel as it is highlighted in Program Grid Guide.

Sort Screen

Lists programs for all channels by category and sub-category for multiple days.

Record/Watch Screen

Shows date, title, and start time of the programs that are scheduled to be watched or recorded. Also allows the user to delete any programs, and make changes to the recording specifics, like number of times to be recorded and recording speed.

Channel Editor (Customizes Program Guide)

Change channel order of appearance, Activate/Deactivate Channels: Active, channels appear in Grid. Not Active, channels do not appear in Grid guide.

Menu Bar (Additional options)

Grid

Displays program listings by channel and time.

Sort

Displays program listing by category and time, for example, Sports, Movies, etc.

Schedule

Shows a list of programs set to be watched or recorded. Edit the schedule to remove programs or change recording options.

Messages

Displays a list of messages sent to the Guide.

Editor

Displays your channel lineup; each channel may be turned on or off. (Will appear, won't appear.)

Setup

Use to change Guide Setup, Zip or Postal Code, Cable Box and VCR settings and also to view the GUIDE Plus+ Overview Demo.

TROUBLESHOOTING

Won't record or watch.

- Setup was not performed.

Only Records in SP (Short Play)

- Press VIDEO, DVD or VCR+ twice to get recording options menu.

Doesn't display programs in Grid

- TV not turned off long enough for data to be received.
- Cables not connected?

Video Menu

Customize the picture quality on your Entertainment Machine.

1 Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button to select the Video Menu. Or just press the PICTURE button to instantly access the Video Menu.

2 Press ENTER to access the Video Menu.

3 Use the UP/DOWN arrows to select one of the following options. Your options are:

- **Contrast:** Changes the amount of difference between black levels and white levels in your picture.
- **Brightness:** Increases or decreases the amount of white in your picture.
- **Sharpness:** Raise or lower the definition of the picture. The lower the level, the softer the image will appear.
- **Color:** Adjust levels of all colors.
- **Tint:** Adjust the relative amounts of the color red and green in your picture.
- **Color Temperature:** Set this to Warm for hotter colors such as red, or set to Cool for less intense colors with more blue.
- **EZ Video:** Choose from a range of options depending on your viewing situation.

Custom: This feature allows you to customize the Contrast, Brightness, Sharpness, Color and Tint settings for three types of screen sources (e.g. **Type 1:** DTV-ANT; **Type 2:** Antenna/Cable 1 and 2, Video1/Video2/Front Video; and **Type 3:** DVD/VGA [Component/RGB]). Once you have selected your settings for each type of source, **Custom** uses the settings you have manually chosen for each customized type of video source.

Normal: The picture quality is pre-optimized for all three types of video input sources outlined above. Normal restores the levels to their original settings. Settings may vary depending upon your current source.

Movie: Adjusts Video settings to enhance Movie viewing.

Video Game: Adjusts Video settings to enhance video games.

Sports: Adjusts Video settings to enhance sporting events.

Weak Signal: Adjusts Video settings to compensate for a weak reception.

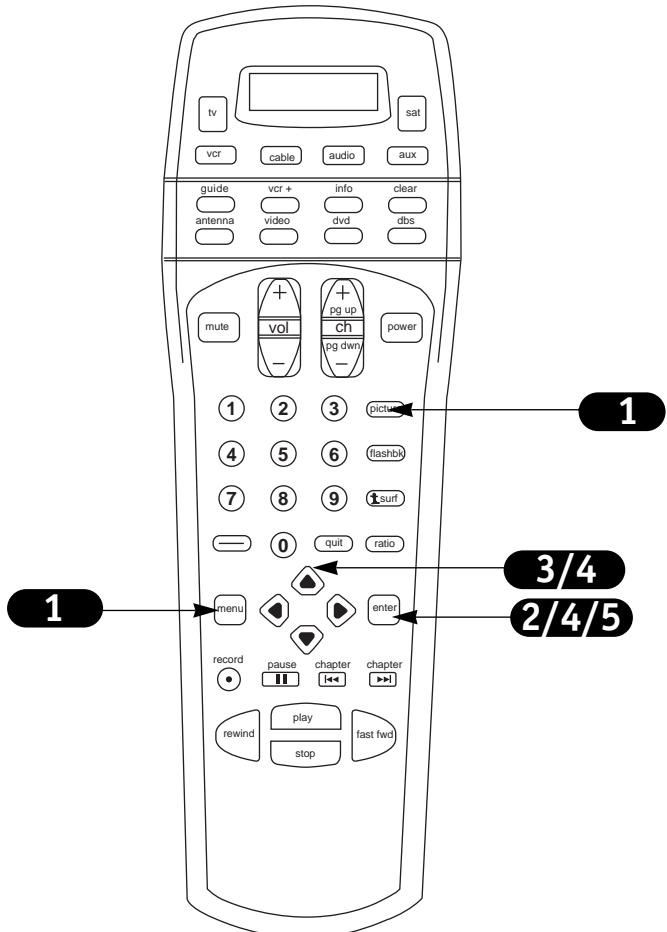
Daylight: Adjusts Video settings for daylight conditions.

4 Use the UP/DOWN select your preference and the LEFT/RIGHT arrows to adjust your preferences.

5 Press the ENTER button to save your choices and return to TV viewing.



Once any value in the Video Menu has been changed, your TV will display the "Custom" indicator in all settings.



Audio Menu

Customize the sound on your Entertainment Machine.

1
Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button to select the Audio Menu.



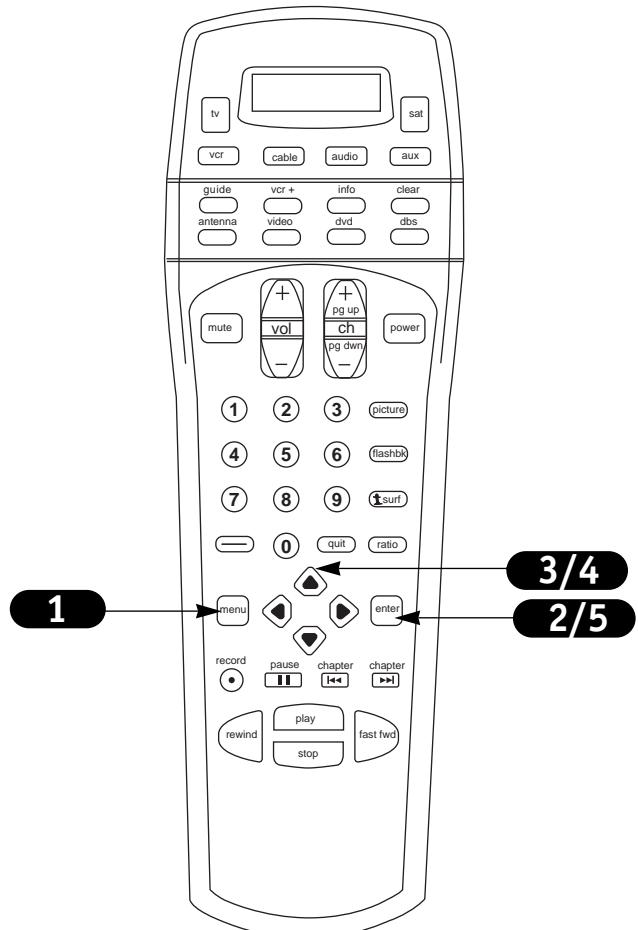
2
Press ENTER to access the Audio Menu.

3
Use the UP/DOWN arrows to select one of the following options. Your options are:

- **Bass:** Increase or decrease lower-end sounds.
- **Treble:** Increase or decrease higher-end sounds.
- **EZ Sound:** Allows you to choose an appropriate listening setting based on different audio options. They are: Custom, Normal, Stadium, News, Music and Theater. Normal resets all audio settings to the original levels.
- **EZ SoundRite:** Scans for changes in sound level during commercials, then adjusts the sound to match your current audio levels. This will make sure that the volume level will be consistent whether you are watching commercials or a regular TV program.
- **Audio Mode:** If you want to change the sound from Mono, SAP or Stereo in Analog channel or the language from English, French, or Spanish in digital channel, select this mode.
- **Front Surround:** Gives a sense that the sound is open and expanded.
- **Internal Speaker:** Allows you to turn the regular speakers on (STEREO) or off. Many people who use a home stereo system with their TV use this feature. Also you can use TV speaker of external Multi channel audio sounds (CENTER).

4
Use the LEFT/RIGHT arrows to adjust your preferences and use UP/DOWN select your preference and.

5
Press the ENTER button to save your choices and return to TV viewing.



Aspect Ratio

Select the screen size for the program you are viewing.



1 Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Special Menu. Or press RATIO button to instantly access the Aspect Ratio Menu.

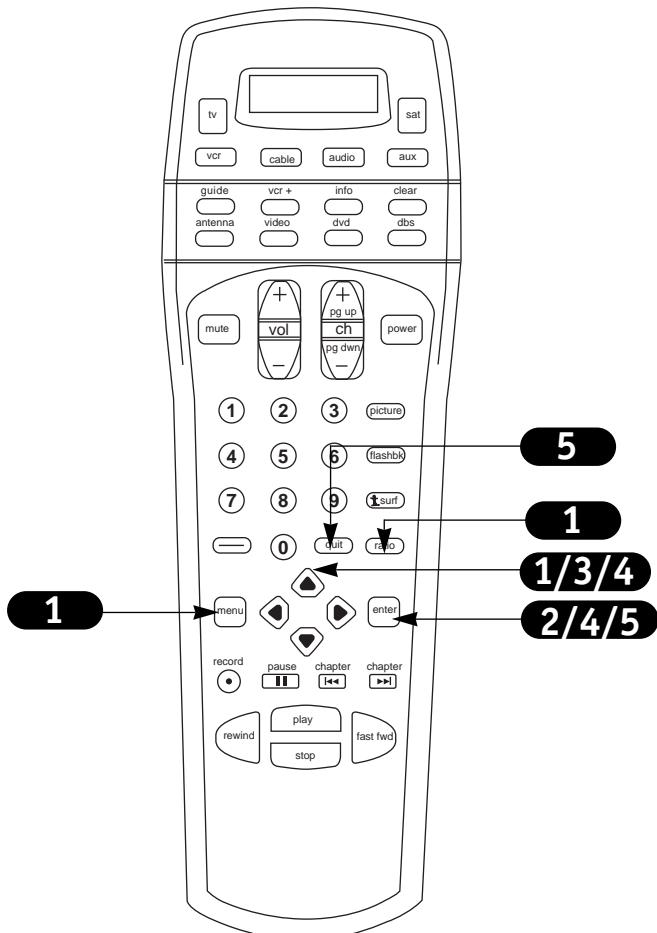
2 Press ENTER to activate the Special Menu.

3 Use the UP/DOWN arrows to choose Aspect Ratio.

4 Press ENTER to move into the Aspect Ratio selection menu. Use the UP/DOWN arrow buttons to select the right ratio for your viewing environment:

- 4:3 - A general TV format.
- 16:9 - A cinema screen picture format.
- ZOOM - A format with magnified upper/lower sides. The bottom and top of the picture may be lost.

5 Press QUIT to save and return to TV viewing or press ENTER to save and return to the Special Menu.



PIP Size

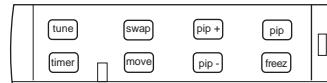
Adjust the size of your Picture-in-Picture window.



1 Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Special Menu.

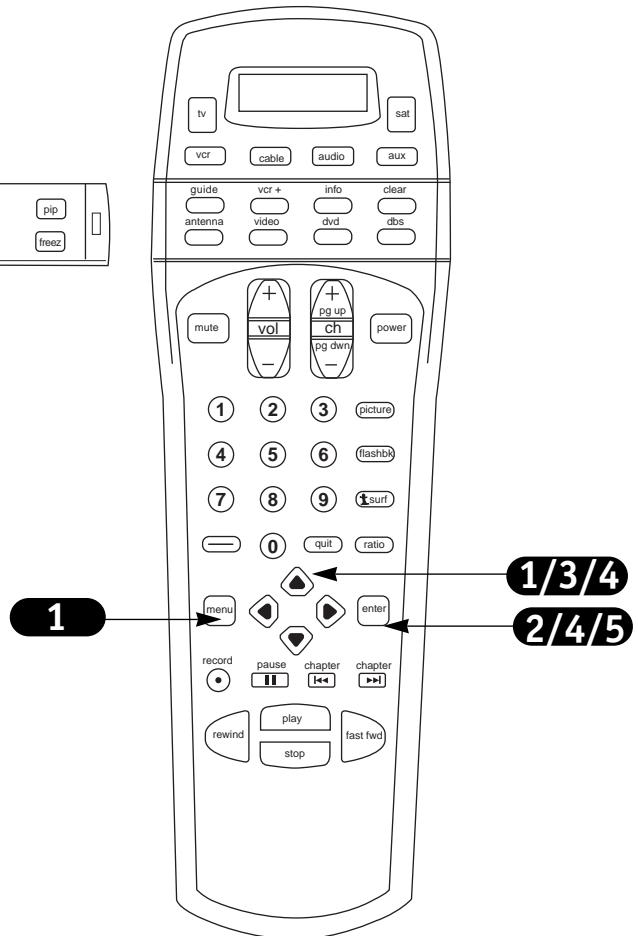
2 Press ENTER to activate the Special Menu.

3 Use the UP/DOWN arrows to choose PIP Size.



4 Press ENTER to move into the PIP size selection menu. Use the UP/DOWN arrow buttons to select Small or Large.

5 Press ENTER to save and return to TV viewing.

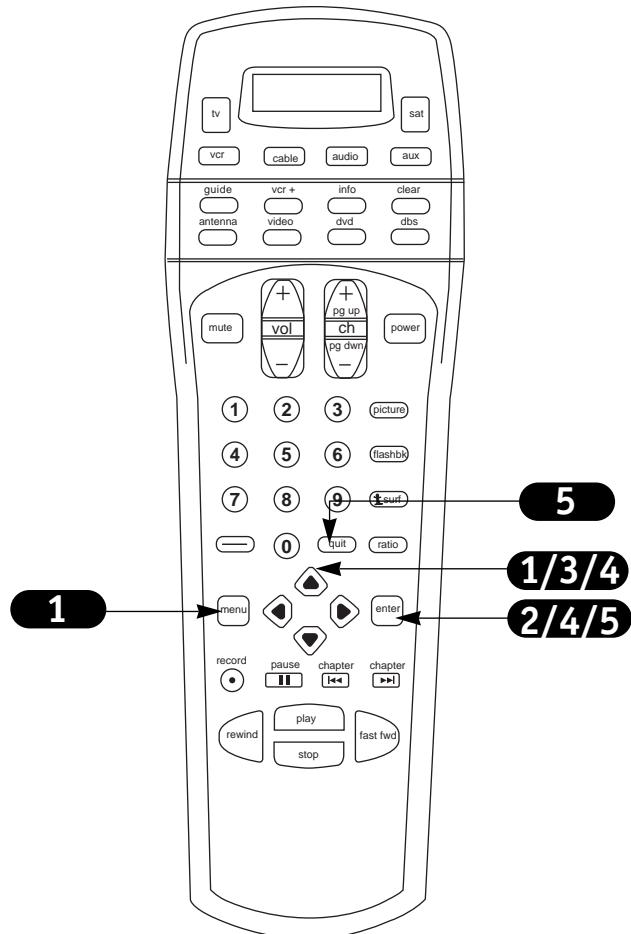


On-Screen Languages

Choose the languages for your on-screen menus.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Special Menu.
- 2** Press ENTER to activate the Special Menu.
- 3** Use the UP/DOWN arrows to choose Trilingual Menus.
- 4** Press ENTER to move into the Language selection menu. Use the UP/DOWN arrow buttons to select the language you wish to view your on-screen menus.
- 5** Press QUIT to save and return to TV viewing or press ENTER to save and return to the Special Menu.



Captions/Text

Turn closed captioning or text on, or off.



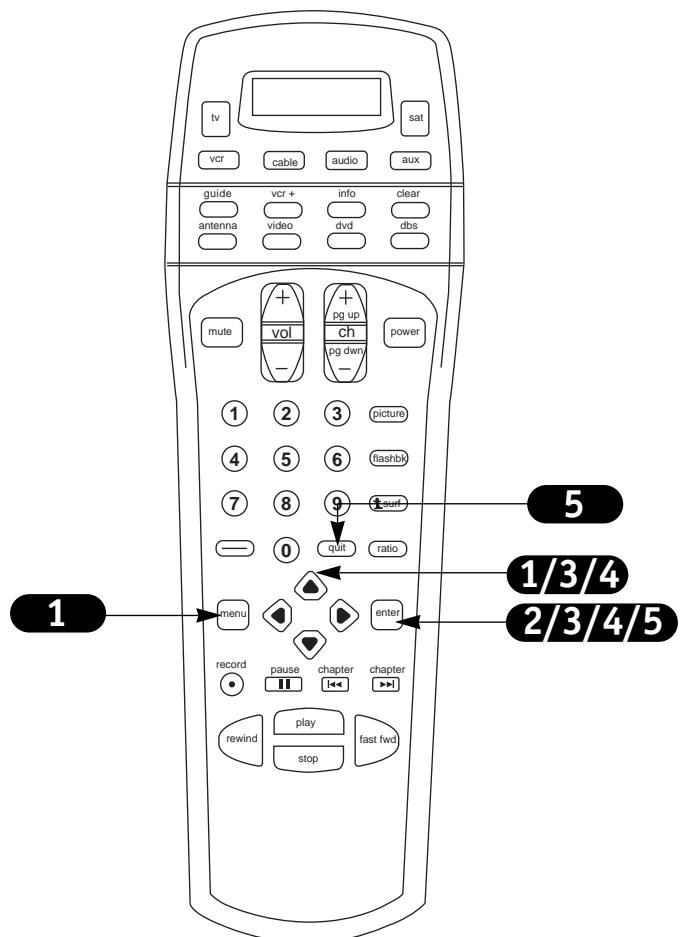
1 Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Special Menu.

2 Press ENTER to activate the Special Menu.

3 Use the UP/DOWN arrows to choose Captions, then press ENTER.

4 Press ENTER to move into the Captions selection menu. Use the UP/DOWN arrow buttons to make your caption selection. Your choices are: Off, Caption 1, Caption 2, Caption 3, Caption 4, Text 1, Text 2, Text 3 and Text 4.

5 Press QUIT to save and return to TV viewing or press ENTER to save and return to the Special Menu.



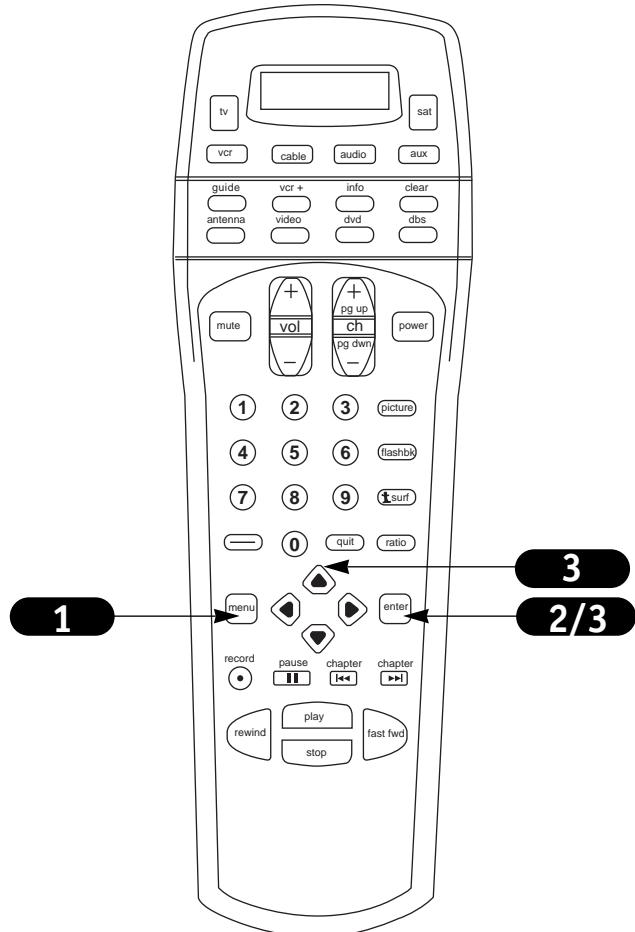
EZ Demo

Your Entertainment Machine will show you all your menu options.



- 1** Press the MENU button on the remote control so that the Setup menu appears.
- 2** Press ENTER to activate the Setup Menu.
- 3** Use the UP/DOWN arrows to choose EZ Demo, then press ENTER to activate EZ Demo.
- 4** Press any button on the remote to stop EZ Demo.

 EZ Demo can be activated when "Screen Source" is in "DTV-ANT," "ANT/CABLE 1" or "ANT/CABLE 2."



Clock Set

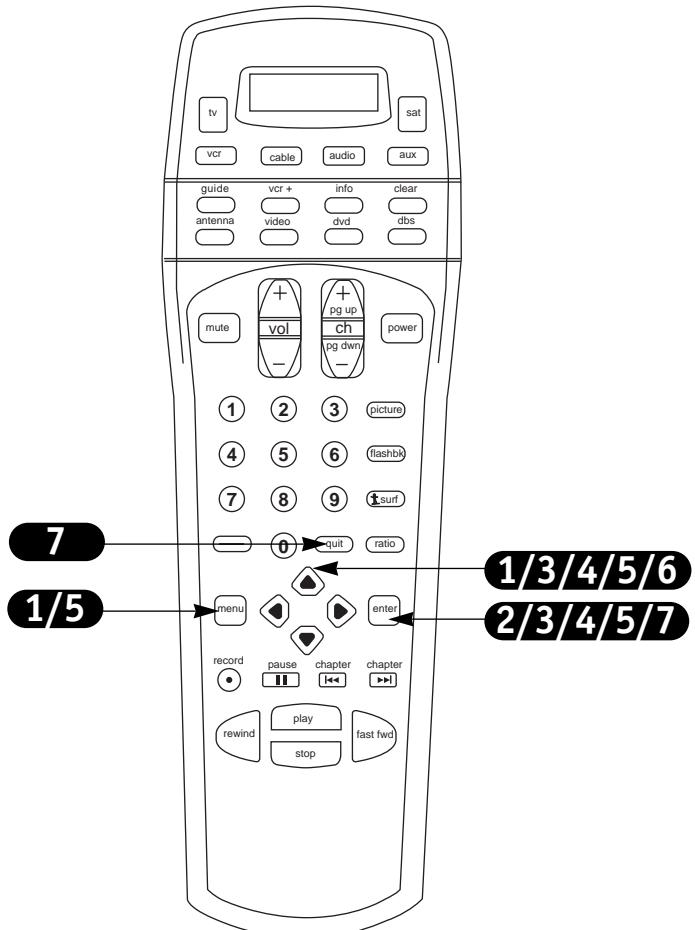
Set the clock or have it done for you, automatically.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Time Menu.
- 2** Press ENTER to activate the Time Menu.
- 3** Use the UP/DOWN arrows to choose Clock, then press ENTER to activate Clock Set.
- 4** Use the UP/DOWN arrows to select Manual or Auto press ENTER to make your selection.
- 5** If you choose Manual, use the UP/DOWN arrows and ENTER/MENU buttons to set the date and time on your Entertainment Machine.
- 6** If you choose Auto, you will be prompted to enter the local PBS channel. Use the UP/DOWN arrows to set the PBS channel.
- 7** Press ENTER to return to TV viewing and activate correct time, or press QUIT to save and return to TV viewing.

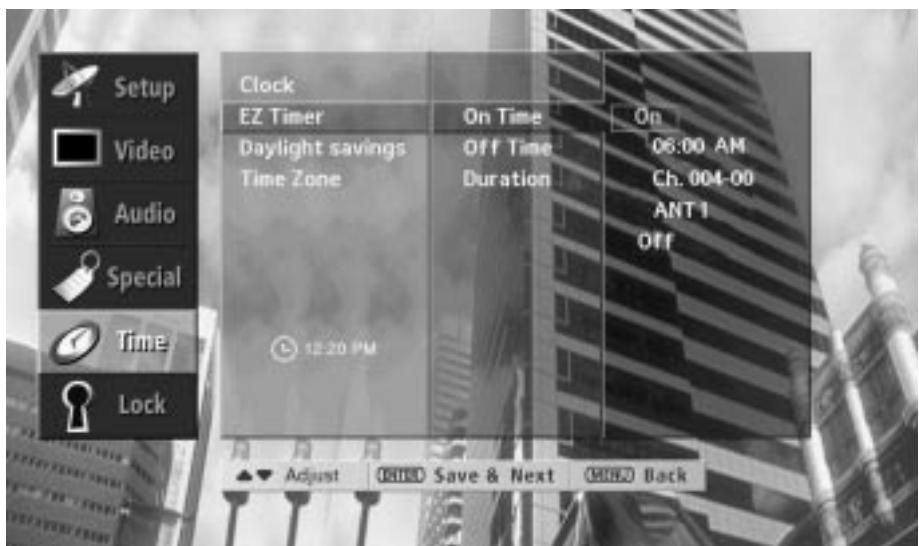


Daylight Savings and Time Zone can be activated when clock is Auto.

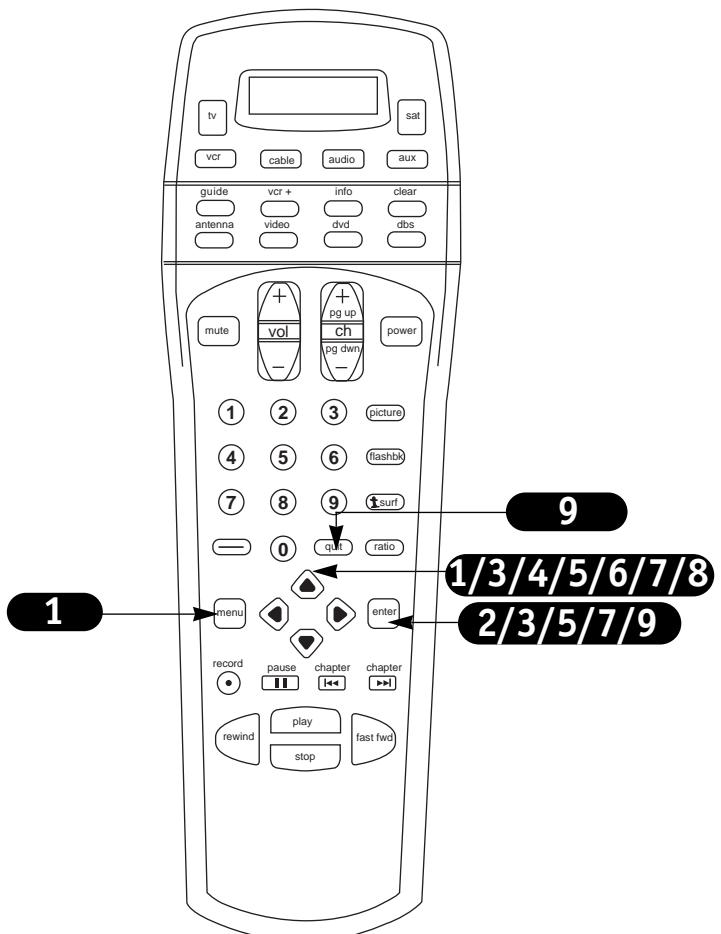


EZ Timer

Have your Entertainment Machine wake up and go to sleep anytime.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Time Menu.
- 2** Press ENTER to activate the Time Menu.
- 3** Use the UP/DOWN arrows to select EZ Timer, then press ENTER to activate EZ Timer.
- 4** Use the UP/DOWN arrows to select the On Time.
- 5** Press ENTER again to begin setting the On Timer. Use the UP/DOWN arrow buttons and the ENTER/MENU buttons to set the On Time. Use the UP/DOWN arrows to set the Channel.
- 6** Use the UP/DOWN arrows to select the Off Time repeat and step five to set the Off Time.
- 7** Instead of setting the Off Time, you could simply select Duration. Use the UP/DOWN arrow buttons to select Duration and then press ENTER.
- 8** Select from the listed time lengths using the UP/DOWN arrow buttons.
- 9** Press ENTER to save and return to the Time Menu, or press QUIT to save and return to TV viewing.

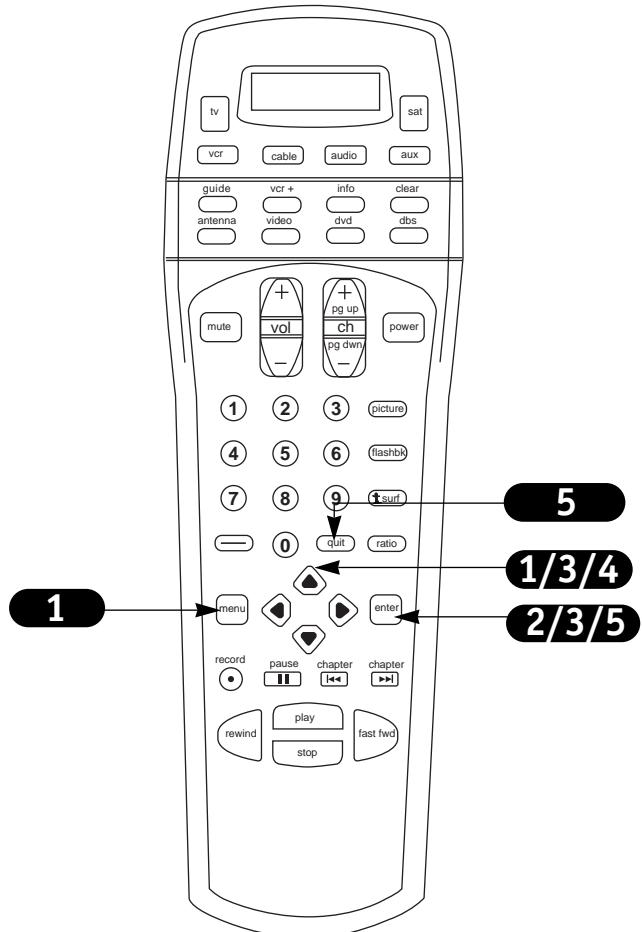


Daylight Savings

Set your entertainment Machine for Daylight Savings



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Time Menu.
- 2** Press ENTER to activate the Time Menu.
- 3** Use the UP/DOWN arrows to choose Daylight savings then press ENTER to activate Daylight savings.
- 4** Use the UP/DOWN arrows to choose On or Off.
- 5** Press ENTER to save and return to the Time Menu, or press QUIT to save and return to TV viewing.

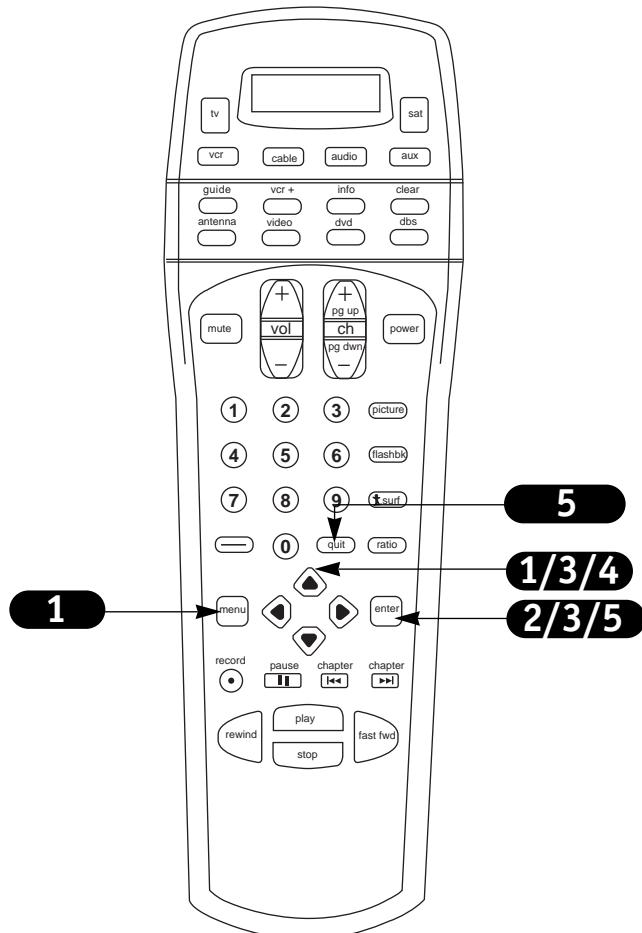


Time Zone

Choose the Time Zone for the clock on your Entertainment Machine.



- 1** Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Time Menu.
- 2** Press ENTER to activate the Time Menu.
- 3** Use the UP/DOWN arrows to choose Time Zone then press ENTER to activate Time Zone.
- 4** Use the UP/DOWN arrows to choose your Time Zone.
- 5** Press ENTER to save and return to the Time Menu, or press QUIT to save and return to TV viewing.



Parental Lock

Determine the channels and video your children can access.

1 Press the MENU button on the remote control so that the Setup menu appears, then press the DOWN arrow button repeatedly to select the Lock Menu.

2 Press ENTER to activate the Lock Menu.

3 Enter your password using the number keypad. (Select "Set Password" to change the password.)

4 Press ENTER to select Lock On/Off.

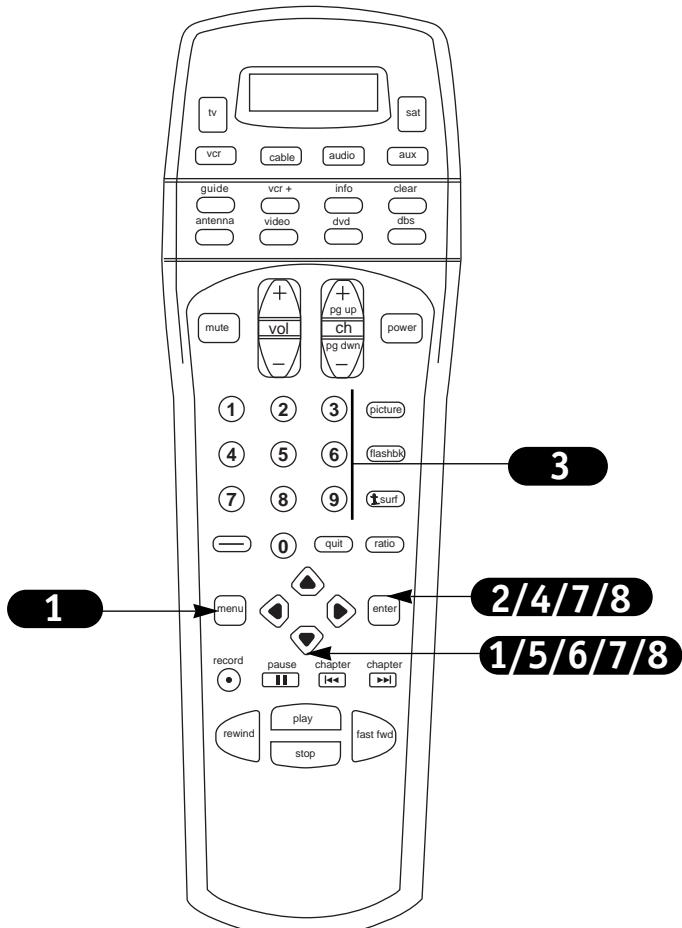
5 Press the UP/DOWN arrow buttons to control parental lock. (The values set in Parental control are valid only when they are appointed as Block On.)

6 Now press the UP/DOWN arrow button to select Set Password. Enter the new password using the number keypad. You will be prompted to re-confirm the password. Re-enter the password.

7 Next, use the UP/DOWN arrows to select Block Channel. Press ENTER, then use the UP/DOWN arrows to select Analog or Digital.

8 For either case, you will be presented with a splash screen of all the channels found in the system. Use the UP/DOWN and LEFT/RIGHT arrows to select a channel. Press the ENTER button to place a block on the channel.

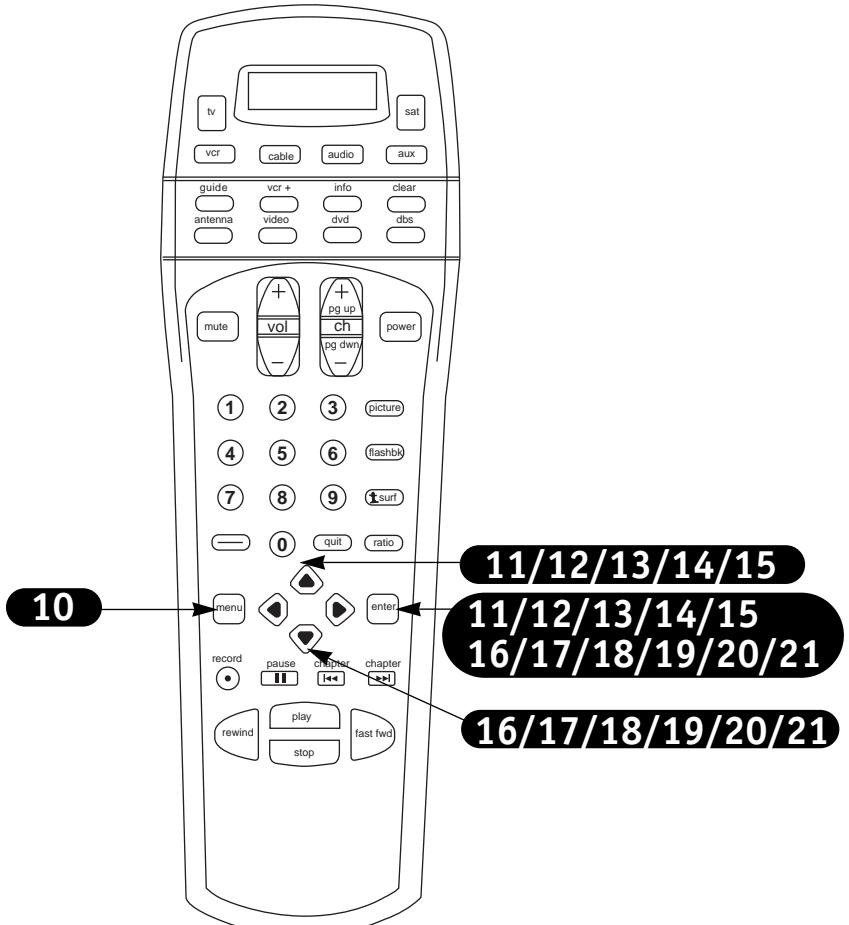
9 See the next page for more details on your blocking options.



Parental Lock (con't)

Determine the channels and video your children can access.

- 10** Press the MENU button on the remote control to return to the Lock Menu.
- 11** Press an UP/DOWN arrow to select MPAA (Rated), then press ENTER.
- 12** Press the UP/DOWN arrow buttons to select one of the MPAA blocking options. Press ENTER to save your choice.
- 13** Press the UP/DOWN arrow buttons to select MPAA (Not Rated), then press ENTER.
- 14** Press the UP/DOWN arrow buttons to select either Blocked or Unblocked. Press ENTER to save your choice.
- 15** Press the UP/DOWN arrow buttons to select TV-PG (Aged). Press ENTER to continue.
- 16** Press the UP/DOWN arrow buttons to select General or Children then press ENTER.
- 17** Press the UP/DOWN arrow buttons to select an option. Press ENTER to save your choice.
- 18** Press the UP/DOWN arrow buttons to select TV-PG (Content). Press ENTER to continue.
- 19** Press the UP/DOWN arrow buttons to select Violence, Sex, Language, Dialogue, F. Violence, then press ENTER.
- 20** For each content, press the UP/DOWN arrow buttons to select the rating, then press ENTER.
- 21** Select Block Source to block Video, DVD, or VGA inputs. Press ENTER to activate Block Source and then use the UP/DOWN arrows to set you options. Press ENTER to save your choices. Repeat this step for all sources.

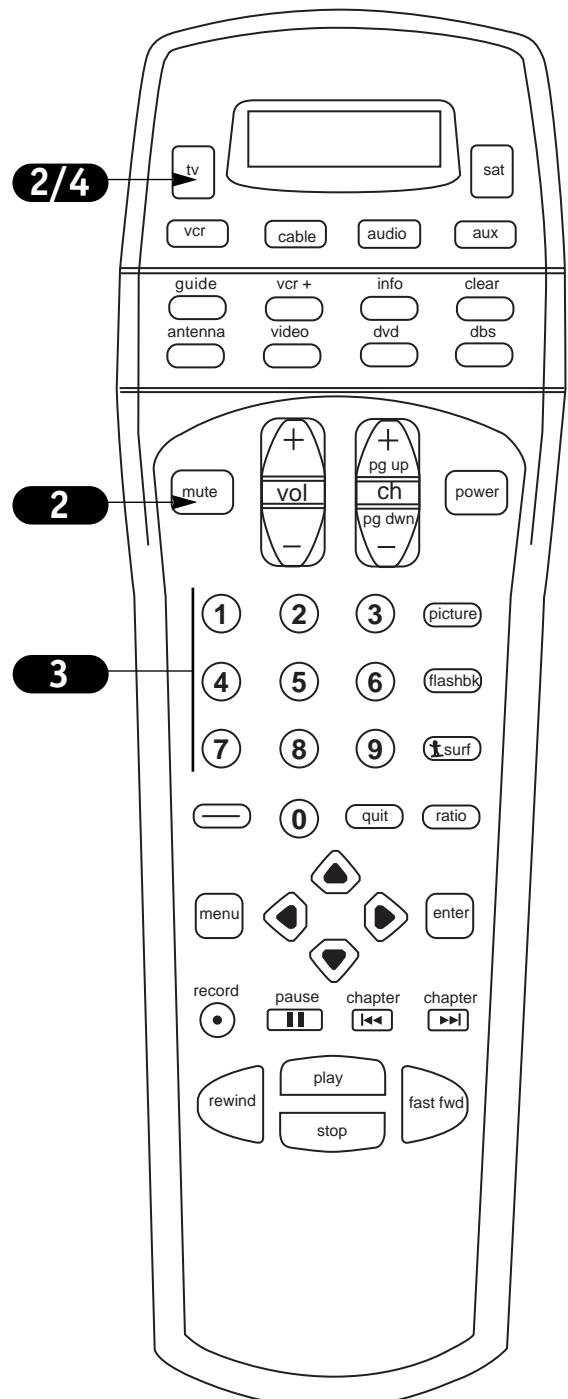


Programming the Remote

Operate all of your home theater and stereo hardware with your Multi-Brand remote.

- 1** Turn on the device (TV, VCR, Cable Box, Satellite Receiver, etc.) you wish to operate.
- 2** On the remote control, press the corresponding DEVICE button (TV, VCR, CATV SAT, etc) and MUTE button simultaneously. Note: "SET" will appear in the LCD.
- 3** Point the remote control toward the device. Using the NUMBER KEYPAD, enter in the first three digit code number assigned to your brand code list located on pp 57-61. The device will turn off when the correct code has been selected.
- 4** Once the device turns off, press the corresponding DEVICE button again to store the code.

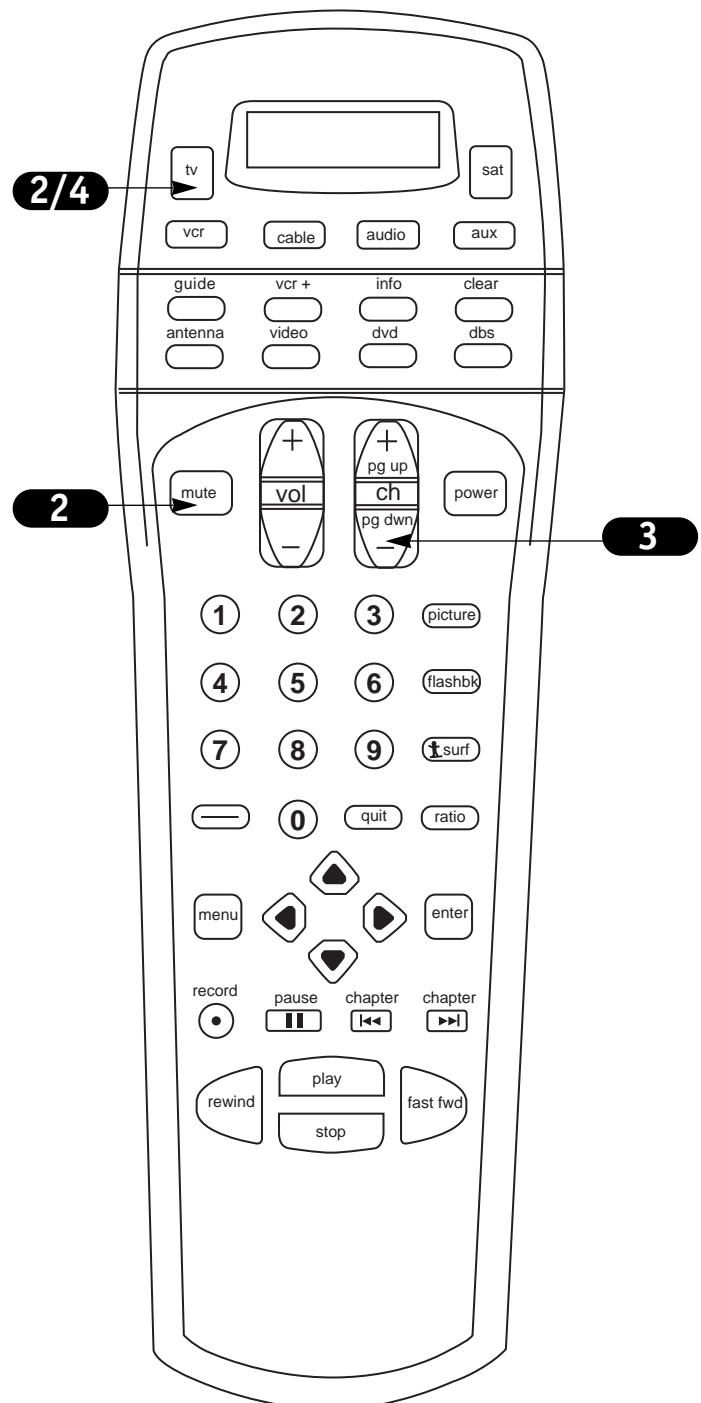
Note: LCD will flash "PASS" indicating that the code has been stored.
- 5** Test the remote control functions with the code that was just stored. If any of the buttons do not perform as they should, please repeat from Step 2 using the next three digit code number for your brand of equipment.



Auto-Search

Use the Remote control to search for all possible programming codes.

- 1** Turn on the device you wish to operate.
- 2** On the remote control, press the matching DEVICE and MUTE buttons simultaneously. Note: "SET" will appear in the LCD.
- 3** Press the Channel UP or Channel DOWN buttons either one step at a time or keep it pressed. The remote control will send out a series of codes. Release the channel button as soon as the device turns off. Note: the LCD will show the code number it just sent out.
- 4** Press the device button to store the code. Note: "PASS" will flash in the LCD indicating that the code has been stored.
- 5** Test the remote control functions with the code that was just stored. If any of the buttons do not perform as they should, please repeat from Step 2.

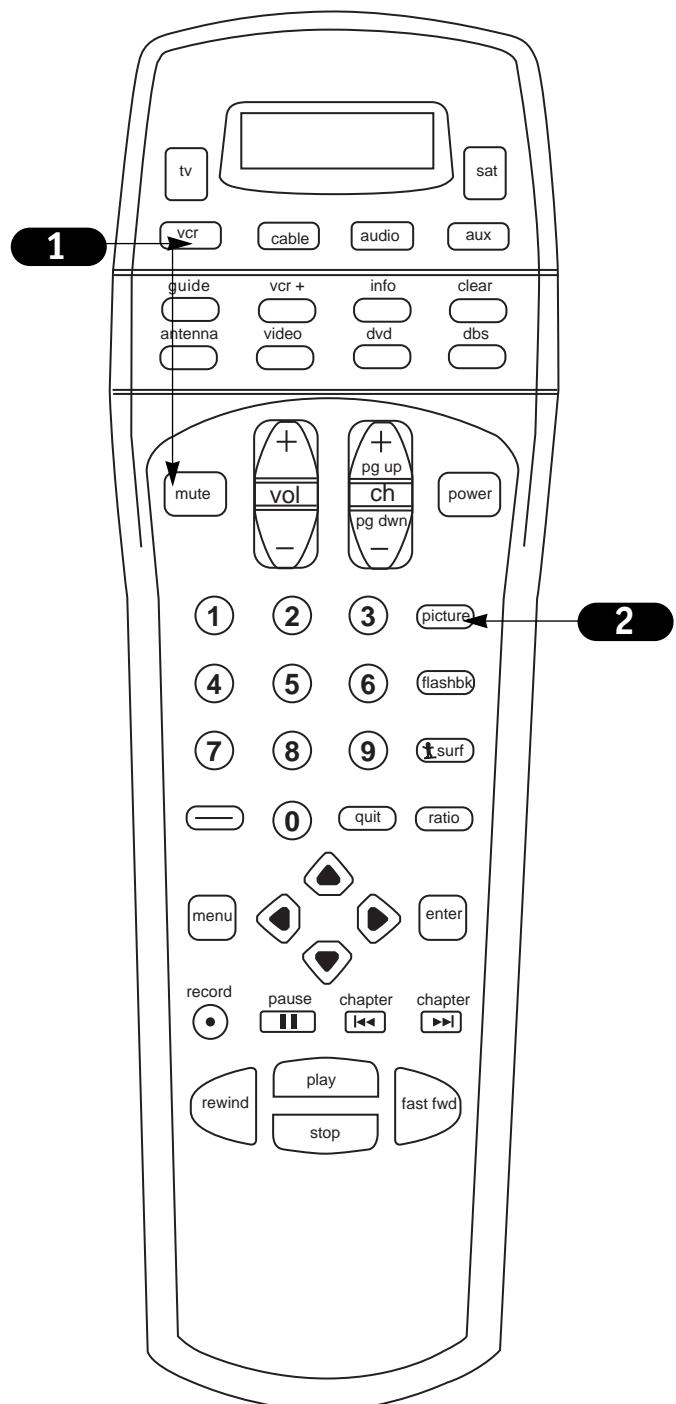


Auto-Find

If you wish to find a code number that has been stored in your remote control, please use the following steps:

1 On the remote control, press the device and mute buttons simultaneously. Note: "SET" will appear in the LCD.

2 Press the PICTURE button. The LCD will flash the three digit code number for five seconds before returning to its original state.



Multi-Commands Memory Buttons

Memory buttons (antenna, video, DVD and DBS) can be set up to store up to six commands with one button push. Any functions, in any device mode (except Channel up and Channel down), can be stored in any one of the four memory buttons. This will enable you, for example, to turn on the TV and Satellite receiver and select a preassigned satellite channel with only a one button push.

- 1** Press the DEVICE button and MUTE button, simultaneously. Note: "SET" will appear in the LCD.
- 2** Press one of the memory buttons that you would like to designate for multi-command or favorite channel operation. Note "M____ (1—4)" will appear in the LCD. The memory button is now ready to be set up.
- 3** Press up to six commands that you would like to store in the memory button. Note: Each successive selection will appear as 1-6 in the LCD.
- 4** Press the Channel UP button to store your selection. Note: SAVE will flash twice and the device mode will appear in the LCD.
- 5** Please repeat the above steps for the remaining memory buttons.

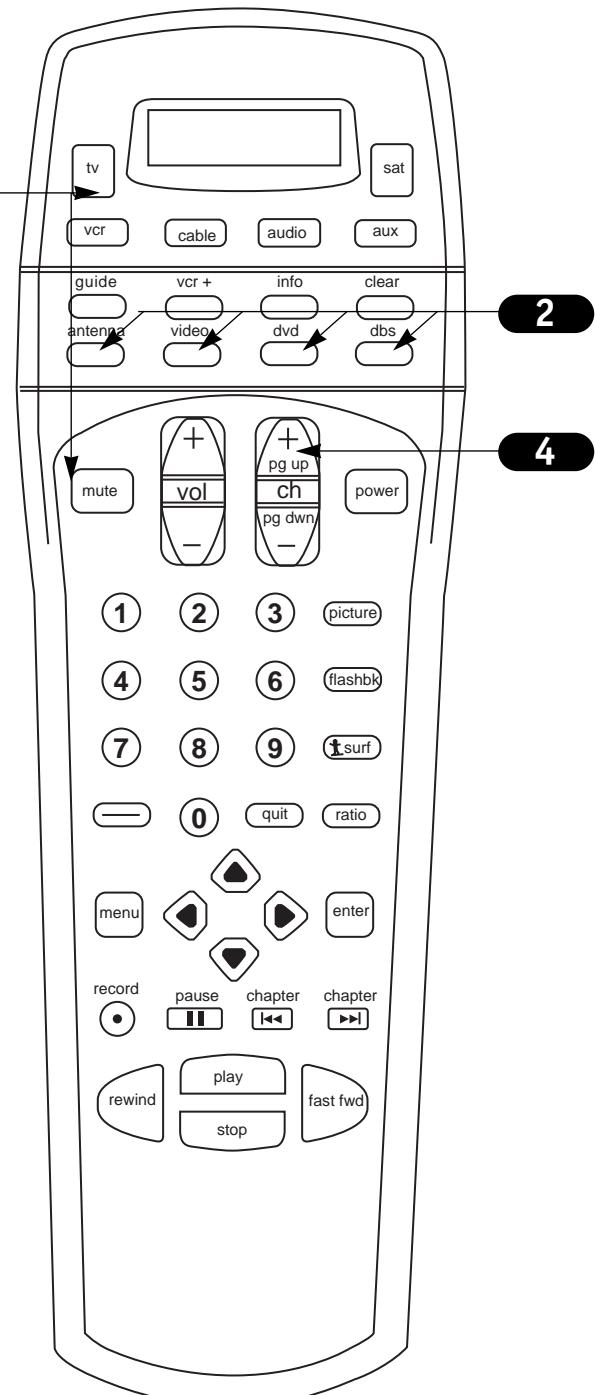
Example

Memory button ANTENNA in the SAT mode can be set up to do the following functions: to turn on the Satellite receiver, select channel #18 on the satellite receiver, and then turn on the TV.

- 1** Press the SAT and MUTE buttons, simultaneously. Note: "SET" Will appear in the LCD.
- 2** Press memory button ANTENNA. Note: "M____1" will appear in the LCD.
- 3** Press the POWER button (on the remote) to turn on the Satellite receiver. Note: "M____1 1" will appear in the LCD.
- 4** Press the #1 button to select the first digit of channel #18. Note: "M____1 2" will appear in the LCD.
- 5** Press the #8 button to select the second digit of channel #18. Note: "M____1 3" will appear in the LCD.
- 6** Press the TV DEVICE button to select the TV DEVICE mode. Note: "M____1 4" will appear in the LCD.
- 7** Press the POWER button (on the remote) to turn on the TV. Note: "M____1 5" will appear in the LCD.
- 8** Press the Channel UP button to store the above commands. Note: "SAVE" will flash and the current Device mode will appear.

Now, anytime the memory button ANTENNA is pressed while the remote control is in the SAT mode, the commands to turn on the Satellite receiver, select the Satellite channel #18 and turn on the TV, will be sent out by the remote control.

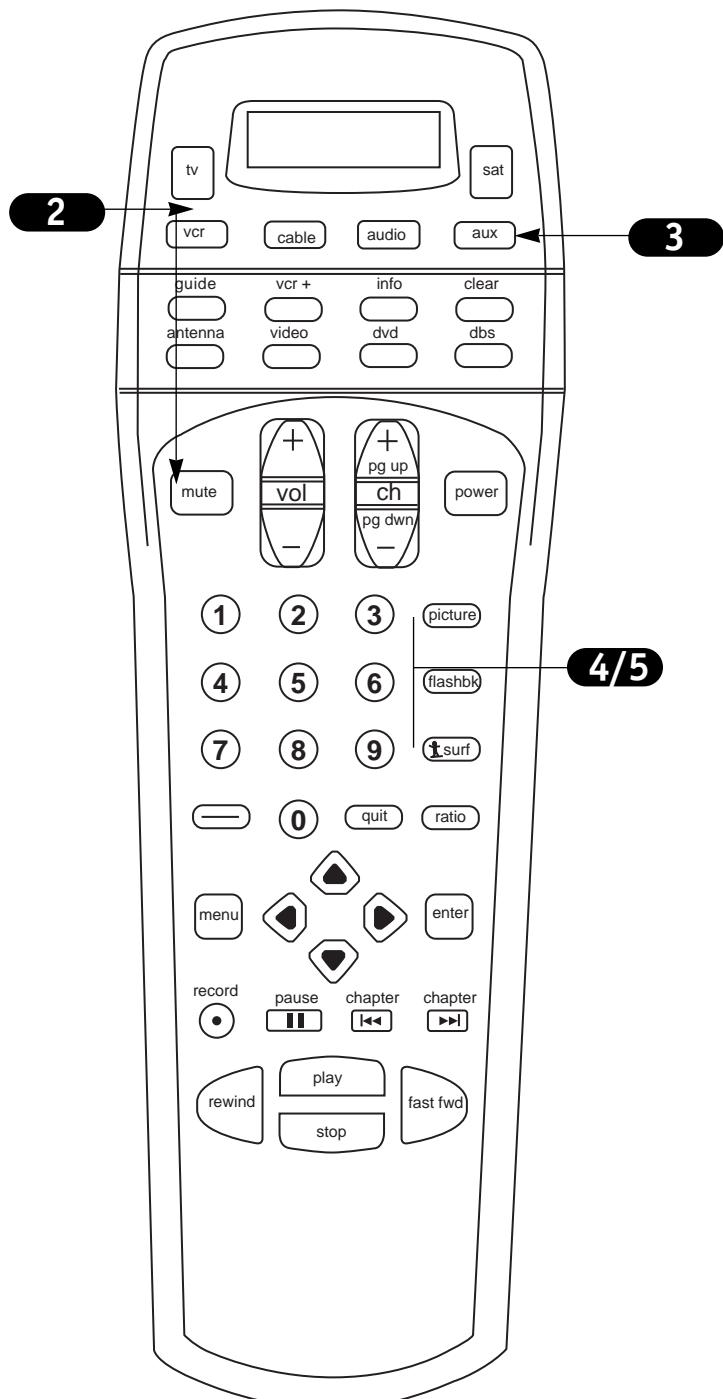
Note: Any previously stored multi-commands on a memory button will be erased when new multi-commands are stored to that same memory button.



More Mode Functions

The feature can be used to program the remote control for more than one TV, VCR, Satellite Receiver, etc. The three digit code for any device can be stored in any of the DEVICE buttons. For example: For two VCRs, the first VCR can be stored in the VCR DEVICE button under normal set up procedures, and the second VCR can be programmed into the unused CATV or any other DEVICE button.

- 1** Turn on the device you wish to operate.
- 2** On the remote control, press the device button you wish to assign this device to, and the Mute button simultaneously.
Note: "SET" will appear in the LCD.
- 3** Press the device button that corresponds to the actual device you plan to operate.
Note: "SET" will appear in the LCD.
- 4** Select the three digit code number from the code list found on pp 57-61 for the device you will be operating.
- 5** Point the remote toward the device, and press in the three digit code number.
Note: "SET ####" will appear in the LCD.
- 6** The device will turn off when the correct three digit code number has been selected. Press the DEVICE button selected in step 2. This will store the three digit code into that DEVICE button. Note: "PASS" will flash in the LCD.



TV and VCR "Punch Through" Controls

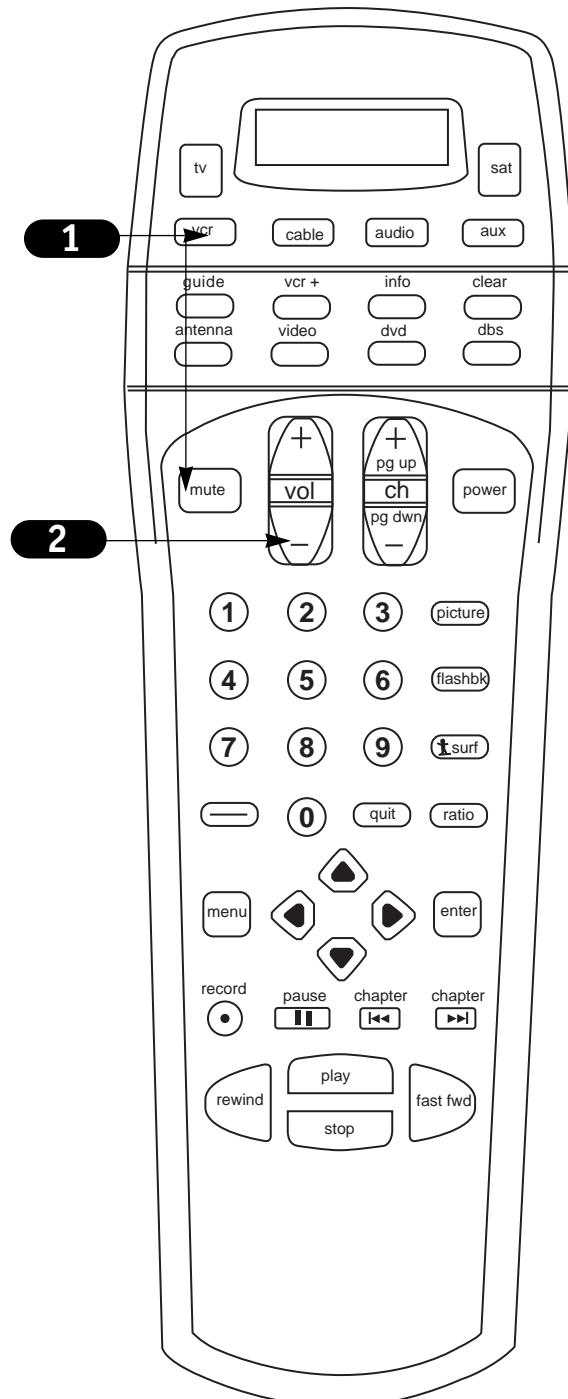
After setting up the remote to work with your respective TV, VCR, CATV, Satellite equipment, etc. the remote control can also be set up so that the TV volume and VCR controls will supersede respective equipment volume control, even when the remote control is in a different Device mode.

TV Volume

- 1 Press the DEVICE button EXCEPT TV(VCR, CATV, SAT, etc) and MUTE button simultaneously. Note: SET will appear in the LCD.
- 2 Press the Volume (+) button. Note: "TV-0" will appear in the LCD.
- 3 To deactivate the TV override, just repeat steps 1 and 2. "TV-X" will appear in the LCD instead of "TV-0."

VCR Controls

- 1 Press the DEVICE button EXCEPT VCR (TV, CATV, SAT, etc) and MUTE button simultaneously. Note: SET will appear in the LCD.
- 2 Press the Volume (+) button. Note: VCR-0 will appear in the LCD.
- 3 To deactivate the VCR override, just repeat steps 1 and 2. "VCR-X" will appear in the LCD instead of "VCR-0."



Programming Codes

TVs

Akai	146	Hitachi	011 163 166 158 143 004 010 012 023 075 001 009 041	Nikei	043	Siemens.	088
Amark	112 143	Infinity.	164	Onking	043	Signature.	072
Ampro.	167 073	Inkel	129	Onwa	043	Sony	070 147 126 085 139 041 079
Blaupunkt	088	JBL	164	Optonica.	019 081	Soundesign	028 003 043 116
Candle	002 003 004	J.C. Penney	008 030 065 101 160 004 024 143 009	Panasonic	034 080 092 056 164	Spectricon	112
Capehart	058	Jensen	013	Philco.	003 024 056 059 060 063 064 164 004 143 043 127	SSS	004 043 116
Citizen	002 003 004 043 101 103 143	JVC	038 083 145 034	Philips	164 038 070 093 001 003 004 143 059 160	Supre Macy	002
Classic	043	KEC	043	Pioneer.	135 025 023 001 018 116 027	Sylvania	003 059 060 063 064 164 044 160 116 127 140
Concerto	004	Kloss	002 059	Portland	004 143	Tandy	081
Contec	039 043 050 051	KMC	143	ProScan	144	Tatung	056 062
Coronado.	143	KTV	043 001 143 154	Proton	116 131 143 058 171	Technics	084
Craig.	043 054	Lodgenet.	072	Quasar	034 092 056	Techwood	004
Crown.	043 143	Logik	072	Radio Shack.	019 043 047 116 127 143	Teknika	002 003 004 024 028 043 072 101 143 031 077 103
Curtis Mathes	101 1161143	Luxman.	004	RCA	160 161 165 065 156 144 001 004 023 024 056 074 152	Telefunken	037 046 086 087
Daewoo	004 016 017 043 044 055 071 076 103 107 111 114 117 120 123 125 127 128 136 143	LXI	166 007 015 164 160 081 052	Realistic	007 019 043 047	Telerent	072
Daytron	116 143	Magnavox	164 059 001 003 060 061 063 064 160 004 143 127	Marantz	001 164 077	TMK	004 116
Dynasty.	043	Matsui	164	Matsui	164	Toshiba	015 138 030 007 040 062 101 051
Dynatech.	062	Memorex	007 072 116	Memorex	007 072 116	Totevision	143
Electrohome.	007 143	Metz.	088	Metz.	088	Universal.	008 009
Emerson	028 048 043 155 005 096 047 116 153 154 051 143 151 001 050	MGA	004 028 042 049 077 116	Metz.	088	Video Concepts	146
Fisher.	077 057	Minerva.	088	MGA	004 028 042 049 077 116	Vidtech	004 116
Funai	028 043	Mitsubishi	109 024 124 001 004 040 116 146 028 042	Minerva.	088	Wards	004 008 009 019 028 060 061 063 064 072 074 116 143
Futuretech.	043	MTC	101 004 062	Mitsubishi	109 024 124 001 004 040 116 146 028 042	Scott	028 043 116 143 048
General Electric	160 144 165 073 130 001 008 009 034 056 074 116 155 091	NAD	015 025	MTC	101 004 062	Sears	015 030 004 007 028 057 143 094 160 116 082 101
Goldstar	102 106 110 112 113 116 119 122 127 137 143	NEC	132 130 134 001 040 016 024 056 007 019	NAD	015 025	Sharp	170 081 019 028 029 014 004 022 143
Hall Mark.	116			NEC	132 130 134 001 040 016 024 056 007 019	Yamaha	004
						Yupiteru	043
						Zenith	072 073 095 157
						Zonda	112

Programming Codes

VCRs

Aiwa	034	Instant Replay . . . 031 033	145 133 140	Sharp	149 031 054
Akai	146 043 046	JCL.	031 033	Shintom	024
	124 125 142	J.C. Penny	012 013 015	Sony	009 056 057
	016		066 040 033		058 077 003
Ampro.	072		101	Philco.	031 033 034
Audio Dynamics . . .	012 023 039	Jensen	043		067
	043	JVC	048 043 130	Philips	031 067 034
Broksonic	035 037 129		150 050 055		101 054 033
Canon	028 031 033		060 012 031	Pilot.	071
Capehart	108	Kenwood	014 043 048	Pioneer	021 048 013
Craig	003 040 135		039	Portland	108
Curtis Mathes	031 033 041	Lloyd	034	Pulsar.	072
Daewoo	005 007 010	LXI	034 101 013	Quartz.	002 014
	064 065 108		014	Quasar	033 066 075
	110 111 112	Magin.	040		145
	116 117 119	Magnavox	067 031 034	RCA	013 020 033
Daytron	108		041 033 068		041 062 063
DBX	012 023 039	Marantz	031 067 012		107 109 140
	043		033 069		144 145 147
Dynatech.	034 053	Marta	101	Realistic	003 008 010
Electrohome.	059	Matsui	027 030		014 031 033
Emerson	006 029 035	MEI	031 033		034 040 053
	025 027 034	Memorex	101 003 010		054 101
	036 037 046		014 031 034	Rico	058
	101 129 131		053 072 139	Runco.	148
	138 017 031		134 033	Salora.	014
Fisher	003 008 009	MGA.	045 046 059	Samsung	032 040 102
	010	Minolta.	013 020		104 105 107
Funai	034	Mitsubishi	059 061 151		109 112 113
General Electric . . .	031 072 144		142 013 020		115 120 122
	147 033 063		045 049		125
	107 109	MTC	034 040	Sansui	022 043 048
Goldstar	012 013 020	Multi Tech	024 034		135
	101 106 114	NEC	012 023 043	Sanyo	003 010 014
	123		048 039		134 007
Go Video	132 136	Nordmende.	043	Scott	017 037 129
Harman Kardon . . .	012 045	Optonica.	053 054		112 131
Hitachi	004 026 034	Panasonic	066 070 083	Sears	003 008 010
	043 150 063				013 014 081
	137 018				101 009 020
					031 042 073

Programming Codes

Cable Boxes

ABC	001 004 039	Golden Channel . . . 030	Pioneer	034 051 001	Sprucer	047 078
	046 053 003			063 076	Starcom	002 004 008
	042	Hamlin 049 050 055	Post News Week . . .	016		009
Antronik	014	Hitachi 001 055	Prucer	059	Stargate	008 030
Archer	005 007 014	Hospitality 070 077	PTS	011 048 071	Sylvania	067
	024	Jerrold 002 003 004		072 073 074	Tadiran	030
Cable Star	026	010 001 008	Pulsar	052	Tandy	017
		009 069 074	RCA	047	Telecaption	021
Century	007	M-Net 037	Regal	049 050	Texscan	029 067
Citizen	007	Macom 033	Regency	057	Tocom	039 040 056
Colour Voice	065 090	Magnavox 012 079 010	Rembrant	025	Toshiba	052
Combano	080 081	064	RK	091	Unika	007 014 024
Comtronics	019 030	Memorex 052	Samsung	030 068	United Cable	004 053
Diamond	023	Movie Time 028 032	Scientific Atlanta	003 011 041	Universal	007 024 027
Eagle	020 030 040	NSC 071 073 015		042 043 045		035 005 014
		028 038		046		026 032
Eastern	057 062 066	Oak 016 031 037	Sheritech	022	Viewstar	086 087 088
		053	Signal	030		089 012 015
Electricord	032	Panasonic 044 047	Signature	001		018
Gemini	008 022 025	Paragon 052	SL Marx	030	Zenith	052 060
	054	Philips 020 065 006				
General Electric	072	012 013 085				
General Instrument	001 074	090				

Satellite Systems

Amplica	050	097	098	099	Luxor	062	Satellite Service Co.	057	028	035						
Birdview	051	113		100	Macom	059	063	064	047	085						
BSR	053		Electro Home	089	065	010		Scientific Atlanta	. 032						
Capetronics	053		Europlus	114		Memorex	057		Sony	103						
Channel Master	013	014	015		Fujitsu	017	021	022	Norsat	069	070					
	018	036	055			027			Panasonic	060						
Chaparral	008	009	012		General Instrument	003	004	016	Pansat	121						
	077					029	031	059		Teeocom	023	026	075			
Citoh	054		Houston Tracker . .	033	037	039			Personal Cable	117	087	088	090			
Curtis Mathes	050			104					Philips	071		Toshiba	002			
Drake	005	006	007		Hughes	068			Pico	105		Uniden	016	025	042	
	010	052	112						President	019	102		043	044	045	
	116				Hytek	053						048	049	078		
DX Antenna	024	046	056		Janiel	060			Primestar	030	110	111	079	080	086	
	076				Jerrold	061						101				
Echostar	038	040	057		Kathrein	108			Prosat	072		Viewstar	115			
	093	095	096						RCA	001	106					
					Legend	057			Realistic	043	074		Zenith	081	082	083
													084	091	120	

Programming Codes

Audio

Adcom	082 092 225	Inkel	197	Niles.....	246	094 131 174
Aiwa.....	012 015 018	J.C. Penny.....	009 079	Onkyo	016 017 046	175 181 184
071 100 104				107 108 115		
114 170 202		Jensen	058	Optimus	022 026 041	
203		Jerrold	042	054 055		
Akai.....	138	JVC	013 116 239	Panasonic	007 032 088	
Anam	081	240 241		195		
Bose.....	070	Kenwood	005 026 064	Philips	027 037 087	
Carver.....	008 027 028	145 146 181		249 250 251		
030 053 061		Lexicon.....	190 197	Pioneer.....	014 033 039	
201 226		234 235 236		044 045 047		
Clarion	174	237		050 066 069		
Denon	002 034 105	Luxmam	035	090 098 222		
227 228 229		LXI.....	078	Quasar	007 088	
230		Magnavox	027 086	RCA	010 049	
Everquest.....	025	Marantz.....	006 027 040	Realistic	001 004 019	
Fisher.....	008 030 064	056 063 065		023 073 075		
077		087		078 080 081		
095		Nakamichi	244 245	095		
Fosgate Audionic..	062 231 232	Mcintosh.....	238	Scientific Atlanta .	043	
Goldstar	011	MCS	009 079	Rotel	074 083 085	
Haitai.....	197	Mitsubishi	242 243	Sansui.....	027 040 110	
Harman/Kardon ..	231 232 233	NAD	029 048	113 119 224		
254		Nakamichi	244 245	Scott	019 081 091	
Hitachi	020			Sharp	026 051 057	

Programming Codes

Auxiliary Devices

ADC	005	208	NSM	044	099 108 152
Adcom	042 056 062	Hitachi	042 087	Onkyo	030 031 038 039 189 193
Aiwa	065 105 112 122 170 187	Inkel	019 020		220 221
Akai	043 195 202	J.C. Penny	014 059 092	Optimus	001 013 029 049 050 057
Audio Technica ..	046	Jensen	158		058 082 083
Audioaccess ..	119	JVC	022 136 194 213 214		084 085 090
Audiofile	229	Kenwood	007 013 016 023 055 071	Panasonic	008 068 103 113 172 201
BSR	037 057		072 142 152		222
California Audio ..	008 103		194 196 197	Philips	032 044 132 149 227
Caretronic	063	Kyocera	005	Pioneer	010 029 064 088 090 094
Carrera	057 080	Lotte	102		106 117 121
Carver	044 050 130 134 135 137 138 139 203 204	Luxman	011 028 070 096		125 174 175
Casio	059 111 116 182	LXI	059 180	Philips	176
Clarinette	116 182	Magnavox	032 044 095 107 121	Proton	044 228
Crown	035	Marantz	036 044 051 077 209 210	Quasar	008 103
Curtis Mathes	059	McIntosh	212	Radio Shack	116 120
Denon	002 123 205 206 207	MCS	014 059 073 092	RCA	017 042 074
Emerson	042 045 069 087 102	Memorex	090	RCX	087 150
Fisher	016 027 048 050 061	MGA	025	Realistic	185
Fraba	111	Mission	044	Rotel	042 049 050
Funai	120	Mitsubishi	025 121	Samsung	051 187 089
General Electric ..	180	Mitsumi	153	Sansui	099 102 180
Genexxa	010 069 090 102	Modulaire	116 182		181 182
Goldstar	009 080	NAD	006 067 121 215 216	Sanyo	021
Haitai	093	Nakamichi	217 218 219	Scott	026 050 061
Harman Kardon ..	018 033 047	NEC	014 062	Sears	075 089 184
		Nikko	046 048	Sharp	069 102
					059
					013 051 066

Maintenance

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have with your new Entertainment Machine. Be sure to turn the power off and pull out the plug before you begin any cleaning.

SCREEN CLEANING

1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your Entertainment Machine.

CABINET CLEANING

1. Use a soft cloth with a mild soap solution to wipe the cabinet.
2. Rinse the cloth and wipe the cabinet again.
3. Let the cabinet air-dry before turning the Entertainment Machine on.

WOOD CABINETS

Use a quality wood cleaner and polish. This will protect the Entertainment Machine from dirt and dust, as well as keep the cabinet looking new.

EXTENDED ABSENCE

If you leave your Entertainment Machine dormant for a long time (such as a vacation), it's a good idea to unplug the power to protect against possible damage from lightning or power surges. If you use an off-air antenna, you may also want to disconnect it from the back of your Entertainment Machine before leaving.

PICTURE INTERFERENCE

Even though you may be getting cable, the signal may be weak, which means the quality of your picture may suffer due to other factors. If there are problems with the image on your Entertainment Machine, consult the Troubleshooting guide on the following pages.

VIDEO GAMES AND OTHER FIXED-PATTERN DISPLAYS

If you use your Entertainment Machine to play video games or for other uses that have single, fixed images, such as a photo-CD player, you should avoid setting the Brightness level too high. If static images, like network identification patterns, are left sitting for too long, they can leave a permanent impression on the picture tube. You can reduce the chance of this happening by limiting the amount of time you use the fixed-image display, and by reducing the contrast and brightness levels.



If you unplug your Entertainment Machine, you may have to reset the clock using the Time menu described earlier.

Troubleshooting

Some quick and easy tips to fixing problems yourself.

SYMPTOMS	SOLUTIONS
Snowy picture and unclear sound.	<ul style="list-style-type: none">• Check your antenna connection or location.• Check your cable input.• Check to see if the TV/VCR button on your VCR has the TV selected.
Multiple images or 'ghost shadows.'	<ul style="list-style-type: none">• Check your antenna direction and/or location.• Check your cable input.• Make sure the cable from your antenna to your Entertainment Machine is properly connected.
Interference: Sharp lines across the screen and unclear sound.	<p><i>The following may cause image problems or distortion: Electrical appliances, powerful lights, cars, trucks; computers or portable phones; medical equipment</i></p> <ul style="list-style-type: none">• If possible increase the distance between your Entertainment Machine and the offending appliance. Or shut one of them off.
Normal picture but no sound.	<ul style="list-style-type: none">• Check volume levels.• Make sure the TV is not Muted.• Try another channel. The problem may be the broadcast, not your Entertainment Machine.• Are the Audio A/V cables properly installed?• Are the wires for external speakers (if you have external speakers) properly installed?• Make sure your speakers turned on under the Audio menu.• If your audio mode is set to SAP, that channel may not have a SAP program.
No picture and unclear sound.	<ul style="list-style-type: none">• Are you in TV or cable tuning mode, and should be in the other?• Make sure output channels on all A/V equipment are on the same channel (3 or 4).• Check that all connections are tight.
No picture and no sound.	<ul style="list-style-type: none">• Is the AC power plugged in?• Check that your AC power outlet works. (Test it by plugging in something else or try another plug.)• Make sure your brightness and audio controls are set properly.• Try another channel. The problem may be with the broadcast.
No color, but the sound is O.K.	<ul style="list-style-type: none">• Check the color control in the Video menu.• Try another channel. The problem may be with the broadcast.
Picture has a big black box on it, but the sound is O.K.	<ul style="list-style-type: none">• The CC (closed caption) option may be in Text mode. Select Caption 1, or OFF in the Captions/Text menu.
Picture has two horizontal black bars, one on top and one on bottom.	<ul style="list-style-type: none">• Your program is in letterbox. This means that the shape of your TV is a square, but the program is a rectangle. Think of the bars as empty space the program doesn't fill; not picture that's blocked out. Because this format is a direct representation of film as you see it in the movies, you are actually seeing MORE of the program when you see those bars.
Missing Secret code	<ul style="list-style-type: none">• If you forget the secret code, press the remote control Button '7', '7', '7' and '7' when the display asks you to enter the secret code.

Troubleshooting, cont'd

Remote control doesn't work.	<ul style="list-style-type: none">• Make sure the batteries are fresh and installed properly.
Menu options can't be changed or selected.	<ul style="list-style-type: none">• Try unplugging your Entertainment Machine for a few minutes, then plug it back in.
No picture or sound when any non-cable source is selected.	<ul style="list-style-type: none">• Check to see if the source equipment has been turned on.• Make sure that the connections are secure on the back of your Entertainment Machine and on the source equipment.
Weak or no Stereo Sound when using a stereo VCR.	<ul style="list-style-type: none">• Check to see if all the connections are secure.• Look in the Audio mode menu to see if all the settings are correct.• You are using channel 3 or 4 to view your VCR. No stereo sound is present under that decision.
The PIP inset is black or lacks contrast.	<ul style="list-style-type: none">• You might want to adjust the PIP picture settings under the PIP menu.• Check that all the wires are connected properly.• Check to see if your input source for PIP is set correctly.
The PIP inset is "snow" when the source is Antenna 1.	<ul style="list-style-type: none">• Look to see if the TV/VCR button on your VCR has the TV selected or change the PIP to another source.
Time is incorrect.	<ul style="list-style-type: none">• Make sure the time was set initially. Probably power was lost.

Glossary

A complete list of definitions for words found in this guide.

75 OHM RF CABLE	The round cable that comes from an off-air antenna or cable service provider. Each end looks like a hex shaped nut with a wire sticking through the middle, and it screws onto the threaded jack on the back of your TV.
A/V CABLES	Audio/Video cables. Three cables - Right audio (red), Left audio (white), and Video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.
A/V DEVICE	Any device that produces video or sound (VCR, DVD, cable box, or television).
ADD	This function lets you add new channels to the list that you'll scroll through when using your remote.
AMPLIFIER	An external device that amplifies sound from a television, CD player, VCR, DVD or other A/V device.
ANALOG TV	Traditional method of representing a television signal as a replica (analog) of the original picture and sound.
ANTENNA	The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible for your home to be using an antenna.
ASPECT RATIO	The ratio of the horizontal dimension to the vertical dimension of a picture. Standard television in the U.S. today is generally transmitted and displayed in a 4:3 aspect ratio. High-Definition television will normally be formatted in a wider aspect ratio, assumed to be 16:9.
CAPTIONS	A form of subtitling that writes out the dialog for your program.
CONVERGENCE	This option lets you correct for color separation in your picture.
DELETE	This function lets you remove channels that you don't watch from the list you'll scroll through.
DIGITAL TV	A new method of representing television signal as a series of binary numbers (1s and 0s). This method allows for the signal to be manipulated to eliminate redundancy to dramatically increase picture and sound quality.
DOLBY DIGITAL	Dolby Digital Cinema Sound is made possible by a new digital coding technique called Dolby AC-3. Dolby AC-3 produces high-quality, 5.1 channel surround sound which is six discrete separate channels for a full range of sound. Each channel can carry a different signal simultaneously (front center, front left, front right, surround left, surround right and subwoofer).
GEMSTAR GUIDE Plus+® GOLD	Premium electronic program guide that uses an easy-to-read grid guide system for channel navigation. On-screen display has full color channel logos, station call letters, 3D graphics, horizontal scrolling, direct tuning access through the grid and theme color coding.
INPUT	Refers to the jack that receives a signal into the TV, VCR or other A/V device.

Glossary (cont'd)

A complete list of definitions for words found in this guide.

JACK	A connection on the back of a TV, VCR, or any other A/V device. This includes the RF jacks and the Audio/Video jacks that are color-coded.
MODE	The mode determines the type of device (TV, VCR, Cable, Aux) that the remote is controlling.
MONO SOUND	Mono (monaural) sound is one channel of sound. On more than one speaker all the speakers play the same audio.
OUTPUT	Refers to the jack that sends a signal out of a VCR, DVD, or other A/V device.
PIP	This is the most common way to refer to the Picture-In-Picture (PIP) option.
PIP SNAPSHOT	Press to capture and freeze main picture within large PIP frame. Press a second time and receive normal PIP from another channel. Press again to remove PIP from the screen.
SECOND AUDIO PROGRAMMING/SAP	Second Audio Programming (SAP) is another, separate, audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.
SIGNAL	Picture and sound traveling through cable, or on the air, to your television screen.
SOURCE	The term for the equipment that provides audio and video information to your Entertainment Machine. Antenna, VCR, DVD players, or Cable Boxes are examples of sources.
STEREO SOUND	Stereo (stereophonic) sound refers to audio that's divided into right and left sides.
SURF	This function creates a customized list of your favorite channels. You can access this group of channels by pushing the surf button on the remote.
TEXT	Arbitrary text not related to the program.
TUNER	Any device that picks up broadcast signals and turns them into picture and sound.
VCR PLUS+® C³	Designed especially for use on cable systems that require a decoder box. Entering the PlusCode of the desired program automatically turns on most cable boxes (and some DBS receivers), tunes it and the VCR to the correct channels, and sets the timer for virtually foolproof recording.

Product Specifications

Specifications

Power requirements	120V, 60 Hz	
Number of inputs/outputs		
Video (In)	3	1 Vp-p, 75 ohms unbalanced, sync negative
S Video (In)	3	Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.280 Vp-p (burst signal), 75 ohms
Audio (In)	5	500 mVrms (100% modulation), Impedance: 47 kilohms
Audio out	1	More than 408 mVrms at the maximum volume setting (variable) More than 408 mVrms (fix) Impedance (output): 2 kilohms
Y, PB, PR for DVD	1	Y: 1.0 Vp-p, 75 ohms w/sync PB: 0.7 Vp-p, 75 ohms PR: 0.7 Vp-p, 75 ohms
RGB Inputs (VGA)	1	15 pin Sub "D" Female
Speaker output (W)	10W x2	
Power consumption (W)		
In use (max.)	360W	
In standby	16W	
TV		
Mass (lbs)	225	
Television system	American TV Standard, NTSC, ATSC	
Channel coverage	DTV: 1 - 99 VHF: 2 - 13 UHF: 14 - 69 CATV: 1 - 125	
Picture tubes	(3) - 7" Liquid cooled, Hi-Resolution	
Antenna	75 ohm external terminal for VHF/UHF	
Screen Size	56" Width	
Supplied accessories	Remote control, batteries 4 size AAA (Alkaline battery)	
Screen Aspect Ratio	16 x 9	

Notes

Notes

Your Zenith Warranty

Service Labor: During a period of one year from effective warranty date, Zenith will provide service labor when needed, as a result of manufacturing defects.

Parts: New or remanufactured replacements for factory-defective parts will be supplied by Zenith for one year from effective warranty date (color picture tubes—two years). Such replacement parts are warranted for the remaining portion of the original warranty period.

Any repair may require that the IQB64W10W be returned to Zenith. Zenith maintains a limited inventory of replacement or loaner IQB64W10Ws for repair purposes, and a replacement or loaner unit may not be immediately available at the time your IQB64W10W requires repair.

Not Covered: This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls, installation or repair of antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of Zenith. Any alteration of the product after manufacture voids this warranty in its entirety.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ZENITH SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS IN CONNECTION WITH THIS PRODUCT.

This warranty is limited to the operation of the product in compliance with the Sarnoff bit-streams and with the listed compatible products. The IQB64W10W has been designed to be compatible with many of the operating and software protocols which may ultimately be used in digital or high-definition television and which are still being established or refined by third parties. The IQB64W10W may have limited capabilities with any such protocols designated after the date of its actual manufacture.

Effective Warranty Date: Warranty begins on the date of sale of IQB64W10W. For your convenience, keep the dated bill of sale or delivery ticket as evidence of the purchase date.

Operating Guide: Read your Operating Guide carefully so that you will understand the operation of your set and how to adjust the customer controls.

Antenna: Reception problems caused by inadequate antenna or faulty antenna connections are the owner's responsibility.

Important: Product Registration—Please fill out and mail your Product Registration Card. It is imperative that Zenith know how to reach you promptly if we should discover a safety problem that could affect you.

Warranty Service: For warranty service information, contact Zenith. Parts and service labor that are Zenith's responsibility will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfactory warranty service, call or write the Zenith Response Center below. You must provide the model number, serial number and date of purchase or date of original installation.

ZENITH ELECTRONICS CORPORATION Zenith Response Center

201 James Record Rd., Building 3,
Huntsville, AL 35824
Telephone (256) 772-1515
Mon-Fri, 7:00 a.m.-8:00 p.m. CST
Sat. 8:00 a.m.-5:00 p.m. CST
www.zenith.com

Digital TV Hotline:
1-877-939-6484

ZENITH CONSUMER SERVICES FACTORY OWNED SERVICE CENTERS

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Lombard, IL 60148
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Parts and Accessories
PTV/Camcorders

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Building 4
Huntsville, AL 35824
(256) 774-4025**
Service Hours:
M-F 8-6, Sat 9-2
Will accept UPS Shipments